

AD-A072 530

HUMAN RESOURCES RESEARCH ORGANIZATION ALEXANDRIA VA
USER MANUAL FOR THE MINIATURE ARMOR BATTLEFIELD (MAB). REVISION--ETC(U)
MAR 62 R A BAKER, J G COOK

F/G 5/9

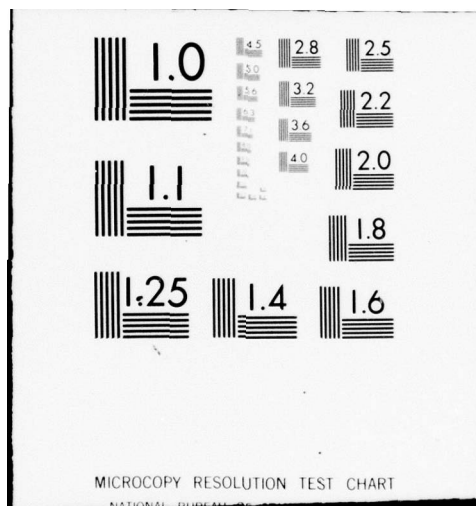
DA-44-188-ARO-2

NL

UNCLASSIFIED

1 OF 2
ADA
072530





5-8473

HumRRO

AD A 072530

LEVEL II

DDC
REF ID: A61019
C

DDC FILE COPY

U.S. Army Armor Human Research Unit
Fort Knox, Kentucky

Under the Technical Supervision of

The George Washington University
HUMAN RESOURCES RESEARCH OFFICE
operating under contract with
THE DEPARTMENT OF THE ARMY

Approved for public release;
distribution unlimited

79 08 06 092

U.S. Army Armor Human Research Unit is established under the command of the Commanding General, United States Continental Army Command. The Human Resources Research Office, the George Washington University, operating under contract with the Department of the Army, employs the Director of Research and other civilian staff members who are assigned to the Unit with the approval of Headquarters, United States Continental Army Command. The Human Resources Research Office provides the Unit with technical supervision in the planning and analysis of the research projects.

Conclusions stated herein do not necessarily represent the official opinion or policy of Headquarters, United States Continental Army Command, or the Department of the Army.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

20. Continued...

exercise. This manual was prepared to provide general guidance to all potential users of the MAB (rather than detailed answers to every question which might be raised), and an overview of the requirements and procedures for its effective utilization.

Three separate appendices accompany this manual. They are: Appendix A: Tank Platoon Tactical Exercises Used with the Miniature Armor Battlefield; Appendix B: Criterion Tests Used for Evaluating the Effectiveness of MAB Training; and Appendix C: Criterion Tests.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) USER MANUAL FOR THE MINIATURE ARMOR BATTLEFIELD (MAB)		5. TYPE OF REPORT & PERIOD COVERED Research Product
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Robert A. Baker and John G. Cook		8. CONTRACT OR GRANT NUMBER(s) DA-44-188-ARO-21
9. PERFORMING ORGANIZATION NAME AND ADDRESS Human Resources Research Organization (HumRRO) 300 N. Washington Street Alexandria, Virginia 22314		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Department of the Army		12. REPORT DATE March 1962 (Revised)
		13. NUMBER OF PAGES
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Research performed by HumRRO US Army Armor HRU, Ft. Knox, KY., under Project UNIT I, "The Evaluation and Improvement of Tank Platoon Training".		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Miniature Armor Battlefield (MAB) Tactical Exercises Unit Training Tank Platoon Leader Tank Crews		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) → The Miniature Armor Battlefield (MAB) was designed to supplement existing facilities for training tank platoon in tactical operations. Basically, it consists of a terrain board, a set of portable terrain features (both natural and man-made), and radio-controlled tanks for two tank platoons, one friendly and one aggressor. A scale of 1:25 is used throughout. Use of the MAB in unit training has been shown to result in a substantial improvement in the performance of tank platoon leaders and tank crews on a tactical field (continued...)		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

US Army Armor Human Research Unit
Fort Knox, Kentucky

(15) DA-44-188-AR0-2

DDC
RECEIVED
AUG 10 1979

(6) User Manual for the Miniature Armor Battlefield (MAB).
(10) Robert A./Baker
John G./Cook
Revision,

(11) Revised Version
March 1962

(12) 137p.

A report of work done in connection with Subtask I, UNIT, Task 11-29,
The Evaluation and Improvement of Tank Platoon Training

Norman Willard, Jr.
NORMAN WILLARD, JR.
Director of Research

George H. Spires, Jr.
GEORGE H. SPIRES, JR.
Lt Col, Armor Chief

Research under the technical supervision of
HUMAN RESOURCES RESEARCH OFFICE
The George Washington University,
operating under contract with
The Department of the Army

BRIEF

The Miniature Armor Battlefield (MAB) was designed to supplement existing facilities for training tank platoons in tactical operations. Basically, it consists of a terrain board, a set of portable terrain features (both natural and man-made), and radio-controlled tanks for two tank platoons, one friendly and one aggressor. A scale of 1:25 is used throughout.

Use of the MAB in unit training has been shown to result in a substantial improvement in the performance of tank platoon leaders and tank crews on a tactical field exercise.

This manual was prepared to provide general guidance to all potential users of the MAB (rather than detailed answers to every question which might be raised), and an overview of the requirements and procedures for its effective utilization.

Additional information and details can be obtained from the CONARC implementation team or from the Military Chief, US Army Armor Human Research Unit, Fort Knox, Kentucky.

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or special
A	

TABLE OF CONTENTS

Brief	1
Introduction	1
Training Need	1
Components of the Miniature Armor Battlefield	1
Method of Operation	2
Use of Training Exercises	2
Training Procedures	2
Personnel Support Required	3
Evaluation of Training Effectiveness	3
Training Applications	4
Operation and Use of the Miniature Armor Battlefield	5
Instructor and Support Personnel Requirements	5
Tactical Training Exercises	6
Training Procedures	6
Operation and Control Features	8
Communications Nets and Equipment	9
Battlefield Pyrotechnics	9
Evaluation of Training Achievement	12
The Tank Platoon Combat Readiness Check	12
The Combat Decisions Test	13
Suggestions for Additional Usage	14
Armor Officer Training	14
Armor NCO Training	14
Tank Crew Training	14
Combined Arms Team Training	14
Criterion for Combat Proficiency	15
Armor Research Tool	15
Preparation of Additional Training Exercises	16
A Note of Caution	16
References	17
APPENDIX A: Tank Platoon Tactical Exercises	
APPENDIX B: Sample Tactical Exercise (for Crew Training)	
APPENDIX C: Criterion Tests	
The Tank Platoon Combat Readiness Check	
Platoon Leader Version	
The Tank Platoon Combat Readiness Check	
Tank Crew Version	
The Tank Platoon Combat Readiness Check	
Platoon Version	
Scenario for Administering the CRC,	
6th ACR	
The Armor Combat Decisions Test	
APPENDIX D: How to Construct Terrain Features	
APPENDIX E: Details of Radio Control Equipment	
APPENDIX F: Housing and Training Platform for the <u>MAB</u>	

LIST OF FIGURES AND TABLES

- Figure 1: Radio-Controlled Tank and Control Units
- Figure 2: Communication Net and Equipment Employed with the Miniature Armor Battlefield
- Figure 3: Circuit Diagram of the R/C Tank Transmitter
- Figure 4: Circuit Diagram of the R/C Tank Receiver
- Figure 5: Internal Components of the R/C Tanks
- Figure 6: Arrangement of Components in the R/C Tanks
- Figure 7: Wiring Diagram of Internal Components of the R/C Tank
- Figure 8: Panoramic View of the Miniature Armor Battlefield
- Figure 9: Arrangement of Equipment in the Individual Compartments of the Movable Platform
- Figure 10: Isometric Diagram Showing How the Platform Is Moved
-
- Table 1: List of Terrain Features and Components Required for Tactical Training on the Miniature Battlefield
- Table 2: List of Spare Parts Required for Local Maintenance and Repair of the R/C Tanks

A. INTRODUCTION

1. Training Need. Effective performance of TOE Armor units in combat will depend largely on the competence of tank platoon leaders and tank crews. As is well known, such competence can be achieved only through realistic training. Realistic training for Armor units must include field exercises of combat type. Time, money, and terrain are required for the conduct of these exercises. One or more of these commodities is often in short supply, and as a result, training suffers.

The Miniature Armor Battlefield (MAB), originally developed as part of the research program of the US Army Armor Human Research Unit, is designed to compensate for the lack of resources which are required to support an optimum program of field exercises. Though the MAB is not designed to replace field exercises, completion of the exercises included in Appendix A has been shown to result in a substantial improvement in the performance of tank platoon leaders and tank crews on a tank platoon field test.

2. Components of the Miniature Armor Battlefield. The MAB consists of the following equipment:

- a. A terrain board, and movable terrain features, such as trees, hills, buildings, and roads.¹
- b. A movable steel platform with compartments for friendly tank platoon personnel. (See Appendix F.)
- c. A permanently fixed bench containing positions for aggressor platoon personnel.
- d. Two platoons of radio-controlled scale model M60 E1 tanks.¹
- e. Pyrotechnic devices for simulating artillery fire and the explosions of atomic weapons and mines.
- f. Two theater curtains dividing the terrain board into three equal segments.

¹A scale of 1:25 is used throughout the MAB. (See Appendix D for directions for constructing terrain features.)

3. Method of Operation.

a. Use of Training Exercises. The exercises which accompany the MAB are designed to provide combat realism, freedom of tactical choice, and freedom for command decisions. All the exercises are designed to teach tactical principles and to emphasize the need for command and control. Specific tactical aspects covered are:

- 1) Operation in open, closed, and semiclosed terrain.
- 2) Seizure of critical and commanding terrain.
- 3) Blocking of enemy avenues of approach.
- 4) Reconnaissance by fire.
- 5) Target designation and control of fire.
- 6) Use of supporting fire.
- 7) Advance and flank guard actions.
- 8) Retrograde movements through natural and artificial obstacles.
- 9) Actions required by detonation of both friendly and enemy nuclear weapons.

For orientation purposes, preliminary training exercises should familiarize personnel with:

- 1) The MAB and operation of radio-controlled tanks.
- 2) Communications and control procedures.
- 3) Tank platoon combat formations.

b. Training Procedures. In the conduct of an exercise, the following procedures should be followed:

1) Before the exercise, sketch maps of the arrangement of terrain features are provided to support personnel for use in the preparation of the battlefield.

- 2) Before the students mount the platform, the platoon leader:

- a) is provided with a sketch map of the area and is briefed on his mission;
- b) makes a visual reconnaissance and completes his plan of execution;
- c) briefs the platoon sergeant and tank commanders on the mission and specifies control method to be used.

3) After students mount the platform:

- a) tank commanders brief their crews;
- b) the platoon radio net is established;
- c) the platoon leader notifies the instructor that he is ready to move out;
- d) upon receiving permission, the platoon leader begins tactical movement.

4) During the exercise:

- a) the instructor controls positioning and movement of aggressor tanks to take advantage of any tactical errors by students;
- b) the instructor stops the exercise if the friendly platoon loses three or more tanks, and starts the exercise over again.

5) After the exercise, the instructor conducts an extensive critique on the conduct of the exercise.

c. Personnel Support Required. In order to conduct an exercise there must be one officer to act as the instructor and two enlisted men to furnish simulated artillery fire.

In addition, there must be personnel available to operate the aggressor tanks during the exercise. These people can be made available from whatever resources are at hand for the commander. If possible, men should not serve as aggressor personnel before they take the exercises themselves, for the aggressor has to be given considerable advance information about each exercise.

4. Evaluation of Training Effectiveness. To evaluate the effectiveness

of training conducted on the MAB, two criterion measures are provided—the Tank Platoon Combat Readiness Check, and the Armor Combat Decisions Test. (See Section C.) The first is a 138-item test of performance in the field under simulated combat conditions. The second is an 11-problem, 275-item written test in which platoon combat situations are outlined; the officer is required to state what actions he would take to solve each problem.

These tests are designed to eliminate, as nearly as possible, any subjective judgments on the part of the scorer. For this reason, scorer personnel do not have to know much about armor doctrine and tactics.

5. Training Applications. The MAB has been shown to be of value in the following types of Armor training:

- a. Armor officer training.
- b. Armor NCO training.
- c. Armor crew training.

In addition to active Army training, the MAB is of particular value to Reserve Components, which are generally limited in terms of real estate for use in training.

B. OPERATION AND USE OF THE MINIATURE ARMOR BATTLEFIELD

1. Instructor and Support Personnel Requirements. To employ the miniature battlefield properly for training purposes, one instructor and two assistant instructors are required. To obtain the maximum benefit from the training method the most experienced officer available, preferably one who has field or combat experience at the platoon level, should be used as the instructor. If an officer who has both combat and teaching experience is available, he should be used. Although considerable training value can be obtained from the miniature battlefield even if the instructor himself is relatively inexperienced, the flexibility of the device and its close simulation of actual combat give the experienced instructor more opportunity to make the training more efficient. Similarly, the more field and combat experience the assistant instructors have, the more effective they will be in helping the instructor.

A minimum of five aggressor personnel are required to conduct the ten tactical exercises provided in Appendix A. Although the miniature battlefield was designed to be used by either a line or training company and in use the trainees themselves would serve as aggressor personnel for each of the tactical problems, some users may prefer to have permanently assigned aggressor personnel. If this procedure is desired, it is advisable that the aggressor personnel themselves be trained as assistant instructors and used in this role to assist the trainees in grasping the armor tactical procedures, principles, and requirements.

In addition to the instructor and two assistant instructors, an R/C tank and radio maintenance man is required. It is recommended that he be an armor communications specialist (MOS 312 or 296). He should be made responsible for the serviceability and maintenance of the R/C tanks and the standard series radios.

2. Tactical Training Exercises. In using the miniature battlefield for training purposes, the ten tactical exercises in Appendix A should be employed. These exercises, written for an intact five-tank platoon, are graded in difficulty from easy to complex; they are not only combat realistic but they also provide freedom of tactical choice and freedom for command decision. Each exercise stresses certain key tactical solutions (one of which is best). These problems, prepared with the aid of the Command and Staff Department of The Armor School, cover such aspects of tactics as:

1. Operations in open, semi-closed, and closed terrain.
2. Seizure of critical and commanding terrain.
3. Blocking of enemy avenues of approach.
4. Reconnaissance by fire.
5. Target designation and control of fire.
6. Use of supporting fire.
7. Advance and flank guard actions.
8. Retrograde movements.
9. Movements through natural and artificial obstacles (e. g., minefields).
10. Actions required by the employment of friendly and enemy nuclear weapons.

To assist the instructor personnel, references to the standard armor training literature are provided at the end of each of the ten exercises.

Each problem is specifically designed for teaching armor tactical principles, and to emphasize the need for command and control. For each tactical problem, a sketch map and a diagram of the position and arrangement of the complex of terrain features are provided to guide the support personnel in preparing the battlefield. Since the terrain features are light and portable, preparing the battlefield for any problem should require no more than 15 or 20 minutes.

3. Training Procedures. To familiarize the trainees with the operation and control procedures of the MAB, some preliminary training is needed before the tactical problems are begun. This training should consist of an orientation lecture on the design and operational procedures used in the MAB, and a

demonstration of the operation and capabilities of the miniature R/C tanks. Next, the communications net and the tactical control procedures to be employed should be explained to the trainees by the instructor. The trainees should then be shown how to operate and control the miniature tanks, and the intact platoon should then conduct 30 minutes or more of exercises using the various platoon combat formations. These preliminary exercises should require no more than two to three hours.

When the familiarization exercises are satisfactorily completed, the tactical training is begun. For each tactical exercise, the instructor should brief the platoon leader on the mission, and give him a normal operations order, including a sketch map of the terrain complex. The platoon leader should then make a visual reconnaissance of the terrain layout and work out his plan of execution. The platoon leader should then assemble his platoon sergeant and the other three tank commanders, brief them on the mission, and specify the control methods to be employed. All the platoon members should then mount the platform, put on their head-and-chest sets, turn on their radios and set them on the operating frequencies, and check into the platoon and company nets. Each driver should then turn on the R/C tank transmitters, and both the driver and gunner should check the functioning of the vehicle. Each tank commander should report to the platoon leader when he is ready. The platoon leader then notifies the instructor (company commander) that he is ready to move out. After receiving permission, he begins his tactical movement.

The instructor meanwhile controls the movement of the aggressor personnel and their R/C tanks, and blocks and counters the movements of the friendly platoon. All the problems are "free play" in nature—that is, the instructor in no instance dictates or corrects any action made by the friendly platoon. He only ensures that the aggressor takes maximum advantage of every tactical

error. If the tanks of the friendly platoon make errors and are not killed by the gun light of the aggressor tanks, tank-killer rounds should be fired by the assistant instructors. During any problem, if the friendly platoon loses more than two tanks, the problem should be stopped and then started again at the beginning.

Each problem can be repeated several times if it is desired, by shifting the positions of the aggressor tanks and by rotating the platoon personnel through the various crew and command positions. When a given problem is completed, the instructor should hold a thorough and intensive critique on the way in which the exercise was conducted.

4. Operation and Control Features. The R/C tank unit, complete and ready for operational use, consists of the tank and a two-part transmitter. (See Figure 1.) The larger transmitter unit is operated by the tank driver and controls all forward and reverse movements, and all right and left movements in various speeds. The smaller unit, an extension from the transmitter, is used by the tank gunner. He controls all right and left turret movements, the elevation and depression of the gun tube, and the firing of the light gun.

For the driver to stop the vehicle, the Forward-Reverse button is moved in the direction opposite to that in which the vehicle is moving. To move either to the right or the left, the vehicle must be moving in a forward or reverse direction. The tank can respond to only two signals at a time, i. e., one signal from the gunner's extension and one from the driver transmitter. It will not respond to two simultaneous signals from the same transmitter. Signals may be sent in rapid succession, however, as long as they occur one at a time.

Approximately one-half to one hour is required for the average operator to acquire skill in controlling the vehicle.

Since the R/C model tank is built to scale and has the same general

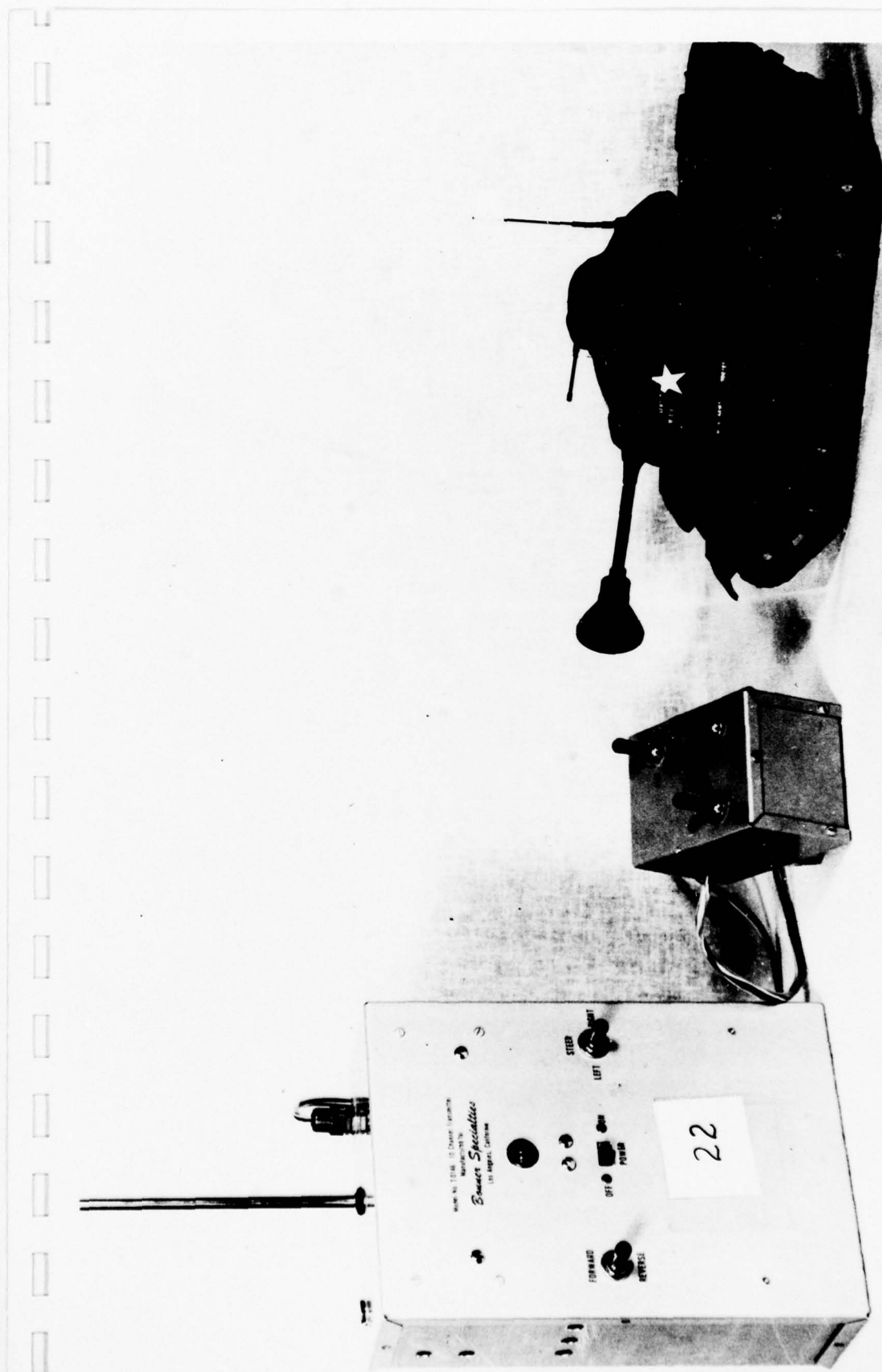


Figure 1

performance capabilities as the actual main battle tank, it can be "bellied" on stumps, rocks or hills; it will roll over, and will fail to traverse slopes greater than 60 degrees.

Each tank should have a spare battery. Batteries can be changed at any time during the conduct of a problem by merely removing the four set screws on the bottom of the tank and disconnecting the power plug. Less than a minute is required.

During the conduct of the training exercises care should be taken to adjust the photoelectric cells so that they are sensitive enough to pick up light from an enemy gun but not so sensitive that they will be constantly triggered by incidental light.

5. Communications Nets and Equipment. To provide communications between the instructor (company commander) and the friendly platoon personnel, six AN/VRC-7 radio sets and individual head-and-chest sets are utilized. Each compartment of the movable platform contains one of the radio sets, bolted to the bench to the right side of each compartment. The other radio set is mounted at the instructor's position on the balcony. Communication between the instructor and the aggressor is furnished by means of individual head-and-chest sets netting with the audio part of the AM-65 of the instructor's radio. A diagram of the communications net employed is shown in Figure 2. A TIQ-2 public address system, also tied into the net, enables observers to monitor the platoon and instructor transmissions.

Power to the radios is furnished by means of a rectifier and an electric extension cord reel (Benjamin Series 7000). A second reel is used to furnish AC power to the "square D" boxes on the carriage.

6. Battlefield Pyrotechnics. To increase the combat realism of the battlefield tactical training exercises, both friendly and aggressor artillery fire is

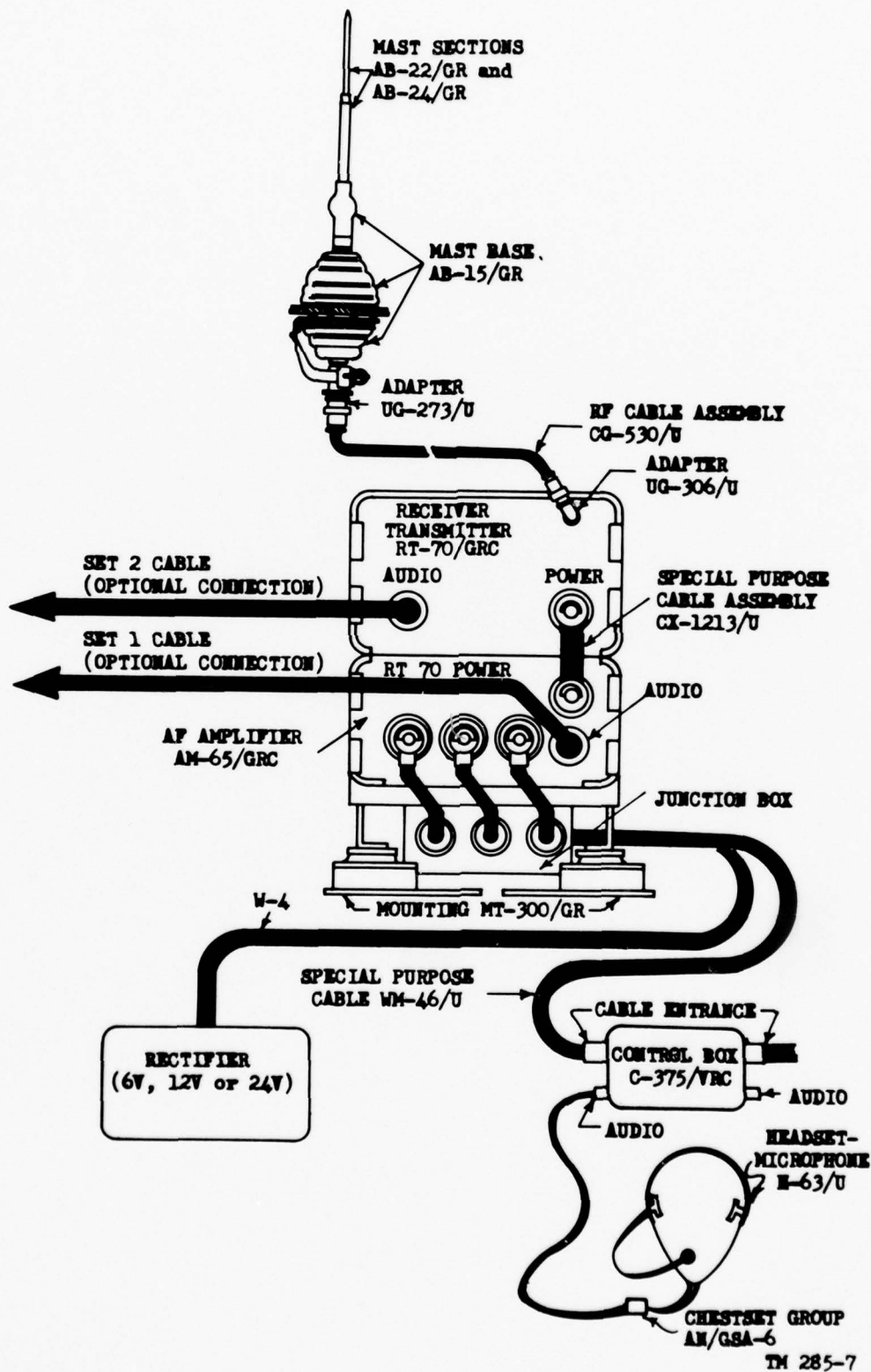


Figure 2

simulated. Using two .50 caliber CO2 powered ball rifles, small explosive pellets—commercially available fireworks known as "cracker balls"—are fired onto the terrain board. By inclosing a "cracker ball" in a J00 gelatin capsule and adding a small amount of flash powder, artillery rounds of varying power and intensity can be simulated. Ordinary slingshots may also be used to increase the volume of fire or as substitutes for the rifles. If the rifles are used, it is recommended that arrangements be made with a pyrotechnic manufacturer to produce preloaded plastic pellets of a uniform size to fit the bore of the rifles.

Artillery fire is also simulated by wiring the individual hills and the terrain board before the tactical exercises begin. A pinch of flash powder is sprinkled on ammunition waterproofing tape and the piece of tape is then wrapped around an electric squib (dynamite caps, available from local ordnance supply, Stock No. 1375-691-1075). This combination produces a small explosion and a flash—strong enough to trigger the tank photoelectric cells but not strong enough to damage the vehicles. Care should be taken to insure that the charges are not detonated directly underneath the R/C tanks. Ordinary firecrackers tossed onto the terrain board at the desired locations may also be used effectively.

Mines are simulated in a similar manner by boring a hole in the terrain board floor, planting the prepared squibs, and then covering the hole with ammunition tape. The mine position is then camouflaged with paint. To avoid damaging armory floors, simulated artillery rounds fired from the air rifles or slingshots may be used as substitutes.

When the preplanted artillery or mines are in position, the wire leads are covered with tape and paint and are extended to a panel of switches at the instructor's position. The squibs can be ignited by either AC or DC voltage of

67.5 volts and up.

Nuclear explosions are simulated by preparing a 1:1 mixture, $\frac{1}{2}$ teaspoon, of black powder and flash powder. This mixture is inclosed in a small piece of aluminum foil along with an electric squib. The foil should inclose the squib and the mixture but should not be tightly wrapped, and it should be open at the top to give the best effects. A small piece of sheet tin or aluminum, painted to blend with the terrain board floor, and small pieces of lichen glued around the outer edges, serve to protect the floor and camouflage the location.

Smoke is produced by preparing small channels of sheet aluminum 10 to 12 inches long. Six to eight pieces of plastic, time-delay fuse cord—perforated every half inch and taped together—are placed in the aluminum channel. An electric squib taped to the fuse cord at one end serves to ignite the cord and provide a slow-burning, heavy and intense smoke screen wherever it is needed.

C. EVALUATION OF TRAINING ACHIEVEMENT

To evaluate the effectiveness of the training administered on the Miniature Armor Battlefield, two criterion measures are provided—The Tank Platoon Combat Readiness Check and The Armor Combat Decisions Test. The first is a 138-item performance test of the platoon leader's ability to command and control a tank platoon in the field, under simulated combat conditions, against live aggressor elements. This test requires several hours to complete. The second is an 11-problem, 275-item, written test in which platoon combat situations are outlined; the officer is required to state in detail what actions he would take to solve the problems. This test requires nearly a full day.

1. The Tank Platoon Combat Readiness Check. This test is based on ATT 17-1, Training Test for Tank Platoon, Tank Company 90mm Gun or 120mm Gun, and is a composite of the best features of platoon training tests used by the tank companies of the 3d and 4th Armored Divisions, the 11th and 14th Armored Cavalry Regiments, and the Armor Combat Training Center (Camp Irwin, California). In creating the Combat Readiness Check, an attempt was made to make it more objective by rewriting each item so that umpire variability was reduced to a minimum.

When the draft of the test was completed, it was critiqued by the Team and Task Force Branch, Command and Staff Department, The Armor School. It was then revised on the basis of the comments, and was submitted for review to the Instructor Groups, 1st and 3d Battalions, 6th Armored Cavalry Regiment. It was then revised and improved again, and was administered to the three platoons of the tank company in the 6th Armored Cavalry Regiment to determine its validity, reliability, ease of scoring, and objectivity. The results clearly showed the test to be a valid, objective, and reliable measure of tank platoon efficiency.²

²A detailed description of the development and evaluation can be found in John G. Cook and Robert A. Baker, The Development and Evaluation of the Tank Platoon Combat Readiness Check, Working Paper (Fort Knox: US Army Armor HRU, June 1961).

Three versions of this test—for the intact platoon, the platoon leader, and the tank crew—are included in Appendix C, so that users of the MAB for training may evaluate the results by testing the platoon, the platoon leader, or the crews.

2. The Combat Decisions Test. This is a written, essay-type examination developed from eleven HOW WOULD YOU DO IT? problems written by various members of the Command and Staff Department of The Armor School, and published in Armor during an eight-year period (1952-1960). Although most of the problems and the School-approved solutions were copied intact, some problems had to be revised to take into account recent changes in tactical and organizational concepts. All the problems, however, require decision and action by the platoon leader, and represent typical combat situations and requirements. Although the reliability and objectivity of this test are unknown, it is believed that it provides a useful index of an officer's tactical knowledge because of its comprehensive coverage of combat operations at the tank platoon level. A copy of the test is included in Appendix C.

D. SUGGESTIONS FOR ADDITIONAL USAGE

Although the MAB was designed as a training method for an intact tank platoon undergoing tactical training at the unit level, it can be effectively used to meet other training requirements.

1. Armor Officer Training. The battlefield can also be used to improve the tank platoon leader's efficiency in the conduct of tactical field exercises. By designating individual officers as tank crewmen, tank commanders, and platoon leaders, and then rotating them through the various crew and command positions for each of the ten exercises, considerable tactical proficiency and understanding of the individual tank's combat role should result.

2. Armor NCO Training. The similarity of the tank platoon leader's and tank platoon sergeant's jobs shows that training on the MAB would also be of value to armor noncommissioned officers. Since the platoon sergeant is second in command within the platoon and is the platoon leader's replacement in an emergency, the importance of his training cannot be overlooked. Since one of the tank commanders is the platoon sergeant's emergency replacement, training on the battlefield would also be beneficial to all tank commanders.

3. Tank Crew Training. Similarly, the miniature battlefield can be used as a vehicle for tank crew training at either the AIT or the BUT level. If this is done, the ten tactical exercises should be modified slightly to place an emphasis on intracrew coordination and responsiveness to commands, and on initiative and combat leadership in emergency situations. This modification can be made by designating individual trainees as platoon leaders, platoon sergeants, and tank commanders, and rotating them through the various crew and command positions.

4. Combined Arms Team Training. The miniature battlefield concept can also be extended to include company level and combined arms team training. Only

the size of the terrain board and the number and type of radio-controlled vehicles used prohibit conducting such training exercises on the MAB. By utilizing a terrain board larger than the Fort Knox prototype, and additional tanks as well as armored personnel carriers and antitank weapons (which may be obtained from the tank manufacturer), it is comparatively easy to conduct company level operations in a highly realistic fashion. Using a theater-type spot projector and colored slides, dismounted infantry units from squad to platoon size can be simulated on the terrain board. Both friendly and enemy infantrymen can be represented by individual spots of light--red for enemy and blue for friendly--in all types of dismounted formations. By switching and substituting slides and by mounting the projector on a tripod or swivel, infantry formations can be projected onto the battlefield as desired, in the formation desired, and in the strength desired, and can be moved as desired. Casualties can be assessed by covering any number of the individual light projections at the light source.

5. Criterion for Combat Proficiency. The MAB can also be used as a test to determine the combat proficiency of already field-trained tank platoon personnel. Such testing could be carried out during continued inclement weather or before a field test or exercise is given. This would enable the company or battalion commanders to determine the readiness of platoon personnel for participation in the field maneuver. It could also serve as a means of refreshing or retraining platoon personnel in tactical procedures and principles, and would result in saving time and money and in reducing the total amount of field training now required.

6. Armor Research Tool. The flexibility of the MAB also makes it useful as a research device for conducting research on new tactical procedures and techniques or on new organizational concepts such as the armor commander's span of control and the advantages and disadvantages of future or proposed armor

organizations—under realistically simulated combat conditions and at a minimum cost.

7. Preparation of Additional Training Exercises. Should local commanders wish to duplicate local terrain and carry out their own field exercises or problems, or to prepare additional exercises for use on the MAB, sketch maps of the area to be used should first be prepared and major or salient terrain features should be constructed. If scenarios for the field exercise already exist, these can then be adapted to the miniature battlefield requirements. If such scenarios do not exist, they should be prepared, using the ten tactical exercises in Appendix A as a guide.

8. A Note of Caution. Although training on the MAB will improve the field performance of tank platoon personnel, by no means should the indoor battlefield be regarded as a substitute for all classroom instruction, or for all field training and realistic combat exercises. Previous classroom instruction and additional field work are needed before maximum combat proficiency can be guaranteed. The MAB does serve, however, to effectively bridge the gap between classroom and field, and will succeed in making any and all additional field training more meaningful and more efficient.

Attention should be directed to the fact that the effectiveness of simulating combat operations indoors has certain limitations. While elaborate and fancy terrain features do have a certain aesthetic appeal, their usefulness in improving combat proficiency is less certain. For many training purposes, a crude approximation or representation is as effective as an expensive or finely made artifact. Moreover, it is doubtful that an extension of the miniature battlefield concept to a training level higher than that of company would be desirable. For combat simulation or training purposes at higher levels of armor organization and command, other approaches and methods may well be more effective and less expensive.

E. REFERENCES

1. Robert A. Baker, An Evaluation of the Effectiveness of the Miniature Armor Battlefield for Tank Platoon Leader Training, Working Paper (Fort Knox: US Army Armor HRU, December 1960).
2. Robert A. Baker, John G. Cook, and William L. Warnick, The Evaluation of the Effectiveness of the Miniature Armor Battlefield for Tank Crew Training, Working Paper (Fort Knox: US Army Armor HRU, March 1961).
3. Robert A. Baker, "The Miniature Armor Battlefield," Armor, LXIX, 5 (September-October 1960), 34-38.
4. Robert A. Baker, "R/C Tanks for Realistic Combat Training," Electronics, XXXIII, 45, McGraw-Hill, (4 November 1960), 55-57.

APPENDIX A: Tank Platoon Tactical Exercises

PROBLEM I - Advance, Seize Critical Terrain, Deny Enemy an Avenue of Approach

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on attached MAP "A." The curtain will be closed in the center of the "battlefield", thereby screening from view a portion of TOWN, all of LIVE ROAD, and HILLS "C" and "D."

b. Enemy. Enemy weapons will be located and sited as indicated on MAP "A." These enemy forces will be concealed from view, and each will be numbered as shown. The INSTRUCTOR will control all enemy activity. Whenever the INSTRUCTOR orders an enemy weapon to fire, ASSISTANT INSTRUCTORS will employ "cracker-ball" ammo to alert the platoon to the fact that the platoon is under fire. Enemy casualties will be assessed by the INSTRUCTOR in response to correct Test Platoon action. The INSTRUCTOR will order enemy guns to fire whenever the Test Platoon does not employ recon by fire on an area in which an enemy weapon is located.

c. Test Platoon. The Test Platoon initially will be located as shown on MAP "B." The Test Platoon leader will be given an oral Operation Order and five copies of MAP "B" by the INSTRUCTOR. The Test Platoon leader will then have 15 minutes to complete his visual and map reconnaissance, brief his tank commanders, and issue his orders. The problem will be "free play" as far as the Test Platoon is concerned. Test Platoon casualties will not be assessed, but will occur normally as the platoon employs improper or incorrect or faulty tactics and techniques. (See paragraph 1b above and paragraph 1d below.) All Test Platoon tanks knocked out by enemy action will remain out of action for the duration of the problem. If the Test Platoon leader's tank is knocked out, the platoon sergeant will assume command (on order of the INSTRUCTOR); if both the platoon sergeant's and platoon leader's tanks are knocked out, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but with platoon communications to the remaining tanks.

d. The Instructor. The INSTRUCTOR will be completely familiar with this document in its entirety. In addition, the INSTRUCTOR will act as the Test Platoon team commander, and will respond to all calls made by the Test Platoon leader; however, the INSTRUCTOR will refrain from coaching the Test Platoon leader. The INSTRUCTOR will orally issue the Operation Order to the Test Platoon leader and give him five copies of MAP "B." No other instructions, reference the problem, will be divulged. When the Test Platoon leader indicates he is ready, the INSTRUCTOR will command "MOVE OUT." The ASSISTANT INSTRUCTOR will plot all Test Platoon moves on a copy of MAP "A." If the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint a new platoon leader and the problem will be run again WITHOUT benefit of a critique. A critique will be conducted ONLY if the problem is completed.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the Test Platoon is to deny the use of LIVE ROAD to the enemy as an avenue of approach into TOWN. (See paragraph 3, operation order.)

PROBLEM I - (Continued)

b. Platoon Movement. The platoon will move as directed by the Test Platoon leader; he will be responsible for all his platoon does or fails to do, and will be scored accordingly. (See paragraph 4, Solutions and Scoring.)

c. Enemy Action. Enemy action will be dependent upon the action taken by the Test Platoon, and will be controlled by the INSTRUCTOR through his ASSISTANT INSTRUCTORS.

(1) WOODS "A." Regardless of the Test Platoon formation, or method of advance, if the platoon does not reconnoiter WOODS "A" by fire, the INSTRUCTOR will order Number 1 (enemy AT Gun) to fire at any test tank which crosses its light beam. If WOODS "A" is reconnoitered by fire, the AT Gun will be declared out of action; or, if the AT Gun has fired (because WOODS "A" had not been reconnoitered by fire) and the Test Platoon returns this fire, the AT Gun will be declared out of action.

(2) The Curtain. The INSTRUCTOR will cause the curtain to be opened as the lead tank of the Test Platoon approaches the approximate vicinity of POINT "X." (See MAP "A.")

(3) Enemy Position 2. If any Test Platoon tanks move to the left (east) of HILL "B," and do not reconnoiter the forward (west) edge of TOWN, the INSTRUCTOR will order Number 2 to open fire. The same conditions will exist, as explained for position Number 1, in paragraph 2c (1) above.

(4) Enemy Positions 3 and 4. Same conditions and actions as paragraphs 2c (1) (3) above.

d. Termination of Problem. The problem will be terminated (or suspended) when any of the following conditions exist:

(1) Test Platoon leader calls team commander (INSTRUCTOR) and reports in essence, "Mission Accomplished."

(2) Test Platoon has lost four (4) tanks to enemy action.

(3) Test Platoon has lost two (2) tanks due to faulty equipment (not the fault of the operator).

(4) Test Platoon communication net is inoperative (NOT tank interphones, or operator, deficiency).

(5) At the discretion of the INSTRUCTOR, if damage to equipment (miniature tanks or terrain features) appears to be imminent.

e. Critique. The problem will be critiqued by the INSTRUCTOR, to include a discussion of the problem by the student operators.

NOTE: None of the above will be issued to the students.

PROBLEM I (Continued)

3. OPERATION ORDER (Issue MAP "B;" order will be given orally.)

a. AN ENEMY ARMOR FORCE OF CONSIDERABLE STRENGTH IS MOVING SOUTHWEST (OFF THE MAP TO THE NORTHEAST) TOWARD TOWN. SCATTERED ENEMY ADVANCE ELEMENTS HAVE BEEN REPORTED IN THE VICINITY OF THE LAKE AND WOODS "F."

b. OUR TEAM ATTACKS IN 30 MINUTES TO DENY THE ENEMY THE USE OF LIVE ROAD AS AN APPROACH FROM THE NORTHEAST INTO TOWN; 1ST AND 2D PLATOONS ABREAST, 1ST PLATOON ON THE LEFT; 3D PLATOON, FOLLOW THE 2D PLATOON. WE DO NOT HAVE ANY ARTILLERY OR MORTAR SUPPORT.

c. WE DO NOT HAVE ANY ATTACHMENTS OR DETACHMENTS.

d. 1ST PLATOON, ATTACK ON THE LEFT. YOUR MISSION IS TO DENY THE ENEMY USE OF LIVE ROAD THROUGH HILLS "C" AND "D."

e. 2D PLATOON WILL DENY THE ENEMY USE OF LIVE ROAD IN YOUR SECTOR.

f. 3D PLATOON, FOLLOW THE 2D PLATOON.

g. I WILL BE WITH THE 2D PLATOON INITIALLY.

ARE THERE ANY QUESTIONS?

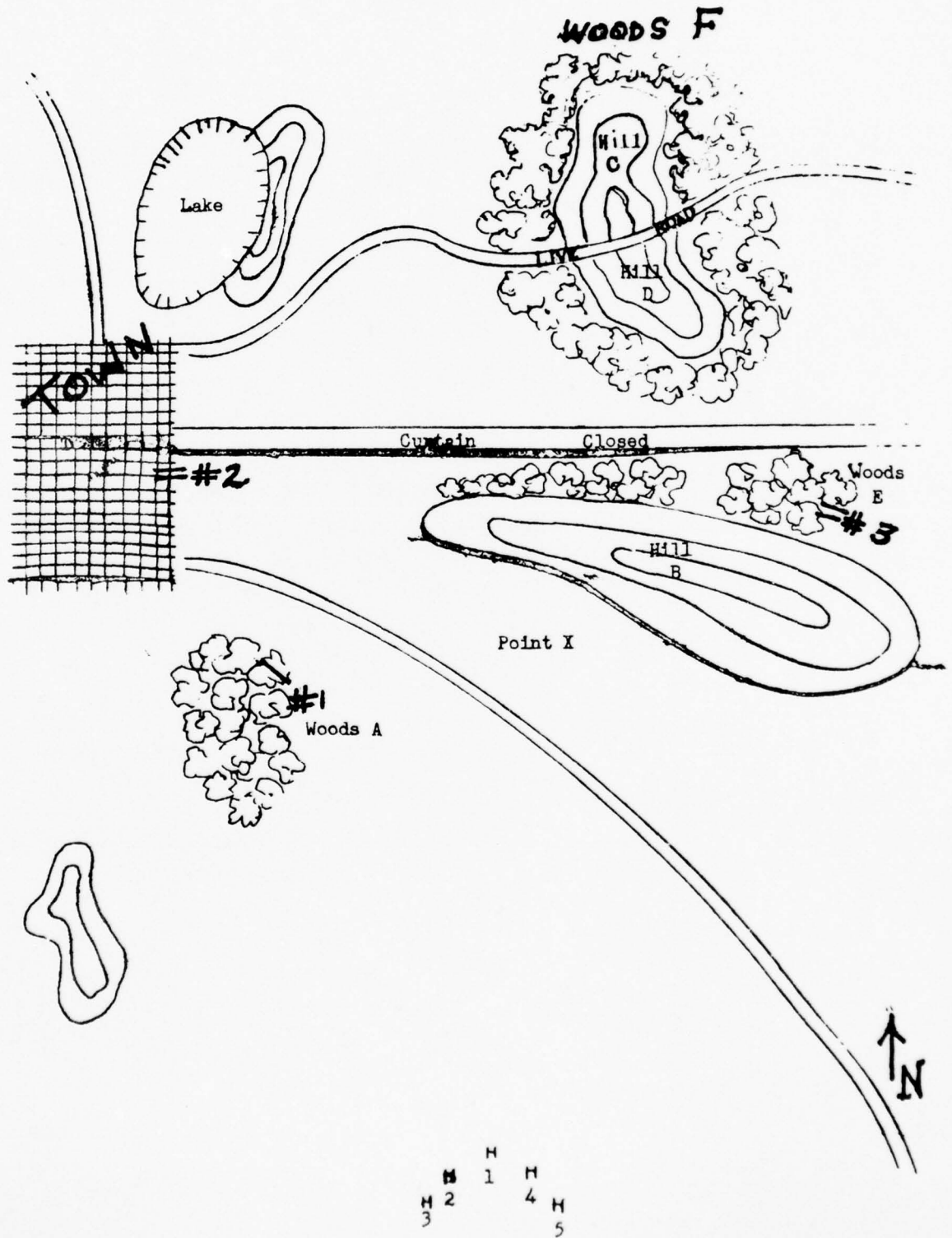
THE TIME IS NOW _____ HOURS.

REPORT TO ME WHEN READY. WE MOVE OUT IN 15 MINUTES.

NOTE: The oral order and 5 copies of MAP "B" will be issued to Test Platoon leader by INSTRUCTOR.

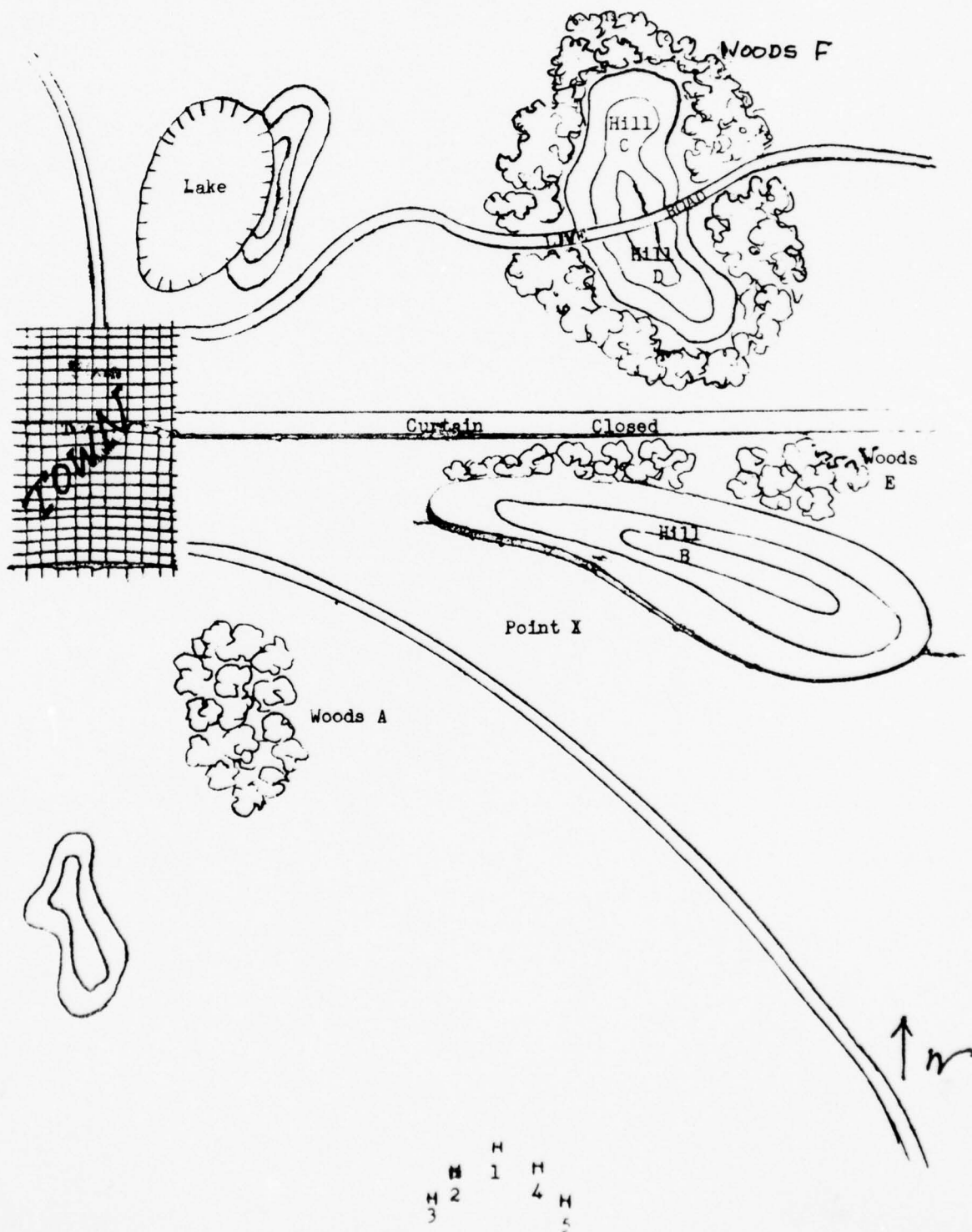
MAP A

Problem 1



MAP B

Problem 1



PROBLEM I - (Continued)

4. SOLUTION AND SCORING SHEET	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area not visible	1	_____
(4) Presents mission of platoon to TCs	1	_____
(5) Issues platoon attack order, and mentions:	1	_____
a. Enemy force	1	_____
Strength (considerable)	1	_____
Direction of movement (southwest)	1	_____
Composition (Armor)	1	_____
Advance elements and (scattered) location (Lake and Woods "F")	1	_____
b. Friendly force	1	_____
Strength (TEAM)	1	_____
Mission (Block enemy approach from northeast)	1	_____
Time of attack (in 15 minutes)	1	_____
Disposition of platoons	1	_____
1st Platoon (on left)	1	_____
2d Platoon	1	_____
3d Platoon (follow 2d Platoon)	1	_____
No supporting fire available	1	_____
No attachments or detachments	1	_____
Mission of 1st Platoon (deny LIVE ROAD to enemy where it passes through Hills "C" and "D")	1	_____
Initial platoon formation (Wedge or Echelon left)	1	_____

PROBLEM I - (Continued) (Solution and Scoring Sheet)

	<u>Value</u>	<u>Score</u>
Scheme for movement, "Plan for Movement"	1	_____
Report when ready	1	_____
(6) Orders some tank to reconnoiter Woods "A" by fire	1	_____
(7) Orders Town to be reconnoitered by fire	1	_____
(8) Orders Woods "E" to be reconnoitered by fire	1	_____
(9) Orders Woods "F" to be reconnoitered by fire	1	_____
(10) Occupies Hill "B" AND	1	_____
Reports in effect, "Mission Accomplished"	10	_____
(11) Moves section around either right or left of Hill "B" and secures Hill "C" or "D"	1	_____
a. Moves around flank of Hill "B"	1	_____
b. Designates manner of move	1	_____
c. Designates tanks to act as base of fire	1	_____
(12) Moves base of fire to either Hill "C" or "D"	1	_____
a. Moves around flank(s) of Hill "B"	1	_____
b. Designates manner of movement	1	_____
(13) Moves entire platoon around right or left of Hill "B" and secures Hills "C" and "D"	1	_____
a. Moves around flank(s) of Hill "B"	1	_____
b. Designates manner of movement	1	_____
(14) <u>No enemy</u> weapon was ordered to fire by INSTRUCTOR	5	_____
(15) <u>One enemy</u> weapon was ordered to fire by INSTRUCTOR	3	_____

PROBLEM I - (Continued) (Solution and Scoring Sheet)

	<u>Value</u>	<u>Score</u>
(16) Any other action taken by the platoon leader other than designated in the "Score Sheet" is worth <u>one point</u> for the entire action taken	1	_____
(17) Complete problem with NO tank losses	15	_____
(18) Complete problem with ONE tank loss	10	_____
(19) Complete problem with TWO tank losses	5	_____
(20) Complete problem with THREE tank losses	2	_____
(21) Complete problem with FOUR tank losses	1	_____

A POSSIBLE SCORE 60

SCORE MADE _____

(22) Deduct FIVE points from SCORE MADE if incorrect radio procedure was habitually used.	5	_____
---	---	-------

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) and paragraph 273, (attack order).

FM-17-33 Paragraphs 5a, 22, 26b, 37, 38, 44b, 50a,c, 51, 62, 63, 83, 92, 93, 96b, 99b, 100.

PROBLEM II - Advance, Seize Commanding Terrain, Block Enemy Escape
Route from TOWN

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on attached MAP "A." The curtain will be open, so that the entire area will be visible.

b. Enemy. Enemy weapons will be located and sited as shown on MAP "A." These enemy forces will be numbered as indicated, and concealed from view. The INSTRUCTOR will control all enemy activity. Whenever the INSTRUCTOR orders an enemy weapon to fire, cracker-ball ammunition will be used in conjunction with the beam of light to alert the Test Platoon to the fact the platoon is under fire. In the event the Test Platoon attempts to attack through the TOWN, all effort will be expended to destroy each test tank after it has progressed to the approximate center of TOWN.

NOTE: INSTRUCTOR will use the wide-beam light.

The INSTRUCTOR will order enemy weapons to fire whenever the Test Platoon does NOT employ reconnaissance by fire on an area in which an enemy weapon is located. Enemy casualties will be assessed by the INSTRUCTOR in response to correct Test Platoon action.

c. Test Platoon. The Test Platoon leader, whose platoon initially is located as shown on MAPS "A" and "B," will receive an oral Operation Order and five copies of MAP "B" from the INSTRUCTOR. The Test Platoon leader will then be given 15 minutes to complete his visual and map reconnaissance, brief the tank commanders, and issue his order. The problem will be "free play" as far as the Test Platoon is concerned. Test Platoon casualties will NOT be assessed, but will occur naturally if the platoon employs incorrect, faulty, or improper tactics and techniques. All Test Platoon tanks which are knocked out due to enemy action will remain knocked out for the duration of the problem. If the Test Platoon leader's tank is destroyed, the INSTRUCTOR will appoint the Test Platoon sergeant to continue the problem; if both the platoon sergeant and platoon leader are "out of action," the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but with platoon communications to the remaining tanks.

d. The Instructor. The INSTRUCTOR will be thoroughly and completely familiar with this document. In addition, the INSTRUCTOR will act as the Test Platoon team commander, and as such will respond to all calls made to him by the Test Platoon leader; however, the INSTRUCTOR will refrain from coaching the Test Platoon leader. The INSTRUCTOR will issue the oral order, five copies of MAP "B," and the order to "MOVE OUT;" but no other instructions, reference the problem, will be divulged. The order to "MOVE OUT" will be given when the Test Platoon leader reports his platoon is ready. If the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint a new Test Platoon leader and the problem will be run again WITHOUT benefit of a critique. A critique will be conducted ONLY if the problem is completed. The ASSISTANT INSTRUCTOR will plot all Test Platoon moves on a copy of MAP "A."

PROBLEM II (Continued)

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The Test Platoon's mission is to block LILLIAN ROAD and prevent the enemy from using LILLIAN ROAD as an escape route from TOWN. (See paragraph 3, OPERATION ORDER.)

b. Platoon Plan and Movement. The Test Platoon will be situated on HILL "A" (See MAP "A"); the Test Platoon leader will be given the oral Operation Order and 15 minutes to make his preparations and issue his order to his tank commanders. The Test Platoon leader will select his own platoon objective; he will be responsible for everything his platoon does, or fails to do, and will be scored accordingly. (See paragraph 4, SOLUTION AND SCORING.)

c. Enemy Action. Enemy weapons are located, sited, and concealed from the view of the Test Platoon, as shown on MAP "A." Regardless of the method of attack or combat formations employed by the Test Platoon, the INSTRUCTOR will cause the enemy guns to fire on the Test Platoon. If the Test Platoon does NOT employ reconnaissance by fire on critical areas, i.e., should the Test Platoon move to the right (east) of WOODS "Z" and does not recon WOODS "Z" by fire, enemy Gun Number 2 will be ordered to fire; if WOODS "Z" is reconnoitered by fire, enemy Gun Number 2 will be declared destroyed by the INSTRUCTOR. However, the Test Platoon leader will NOT be informed of this control action - unless after reconnoitering WOODS "Z" by fire, if a test tank notices the camouflaged gun and attacks it, then the INSTRUCTOR will inform the Test Platoon leader that the enemy gun has been destroyed, continue on mission. So, depending upon the scheme of maneuver (direction of movement), the same conditions mentioned above will exist for enemy guns 2, 3, 4, and 5.

d. Termination of Problem. The problem will be terminated (or temporarily suspended) when any of the following conditions exist.

(1) Problem terminates when:

(a) Test Platoon leader calls team commander (INSTRUCTOR) and reports in essence, "Mission Accomplished."

(b) Test Platoon has lost four (4) tanks to enemy action (see paragraph 1c above).

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty or malfunctioning equipment (NOT the fault of the operator).

(b) Test Platoon communication net is inoperative, excluding tank interphone system, or operator deficiency.

PROBLEM II - (Continued)

(c) The INSTRUCTOR deems it necessary to prevent excessive damage to equipment (miniature tanks or terrain features).

NOTE: None of the above information will be given to the Test Platoon personnel.

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of Map "B")

a. AN ENEMY ARMOR FORCE OF COMPANY SIZE IS REPORTED TO BE IN TOWN.

b. OUR TEAM HAS BEEN ATTACKING NORTH ALONG BRUCE ROAD AGAINST GENERALLY LIGHT ENEMY RESISTANCE. THE ATTACK HAS BEEN HELD UP UNTIL ESCAPE ROUTES CAN BE BLOCKED. FIRST PLATOON (TEST PLATOON), YOU WILL ATTACK IN 15 MINUTES TO BLOCK LILLIAN ROAD, AND PREVENT THE ENEMY FROM USING LILLIAN ROAD AS AN ESCAPE ROUTE FROM TOWN. YOU WILL NOT HAVE ANY ARTILLERY OR MORTAR SUPPORT. YOU WILL NOT HAVE ANY ATTACHMENTS.

SECOND PLATOON WILL BLOCK EAST ROAD OFF MAP TO RIGHT

THIRD PLATOON, BE PREPARED TO ASSIST, ON ORDER, THE FIRST OR SECOND PLATOONS.

I WILL BE WITH THE THIRD PLATOON INITIALLY.

ARE THERE ANY QUESTIONS?

THE TIME IS NOW _____ HOURS.

FIRST PLATOON, REPORT TO ME WHEN READY TO MOVE.

Problem II

MAP B

Problem II

BRUCE ROAD

WEST ROAD

EAST ROAD

BAKER RIVER

Hill B

Hill C

Hill D

Hill A

Woods X

Woods Y

Woods Z

TOWN

I

3 2 1

4 5

Problem II

PROBLEM II - (Continued)

4. SOLUTION AND SCORING SHEET	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes a map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon attack order, and mentions:	1	_____
a. Enemy force	1	_____
Strength (Company size)	1	_____
Location (in Town)	1	_____
b. Friendly force	1	_____
Direction of attack (north)	1	_____
Time of attack (in 15 minutes)	1	_____
Mission of the platoon (block LILLIAN ROAD)	1	_____
Purpose of mission (prevent enemy escape)	1	_____
Disposition of 2d and 3d platoons (2d block EAST ROAD) (3d support 1st or 2d)	1	_____
Fire support available (NONE)	1	_____
Attachments (NONE)	1	_____
Plan of attack, scheme of movement, etc.	1	_____
Report when ready	1	_____
(6) Some tank reconnoiters Woods "X"	1	_____
(7) Some tank reconnoiters Woods "Z"	1	_____
(8) Some tank reconnoiters Woods "Y"	1	_____
(9) Some tank reconnoiters RIVER WOODS	2	_____

PROBLEM II - (Continued) (Solution and Scoring Sheet)

	<u>Value</u>	<u>Score</u>
(10) Platoon leaves base of fire on Hill "A"	3	_____
a. Designates tanks to act as base of fire	1	_____
Section moves directly across ford and takes up position on Hill "C"	3	_____
<u>1.</u> Moves in echelon left of wedge formation	1	_____
<u>2.</u> Moves with guns traversed to cover exposed flank	1	_____
<u>3.</u> Moves around flank of Hill "A"	1	_____
<u>4.</u> Designates manner of movement	1	_____
b. Section moves directly across ford and takes up position on Hill "D"	2	_____
<u>1.</u> Moves in echelon left or wedge formation	1	_____
<u>2.</u> Moves with guns tranversed to cover exposed flank	1	_____
<u>3.</u> Moves around flank of Hill "A"	1	_____
<u>4.</u> Designates manner of movement	1	_____
(11) Moves base of fire section across ford and takes up position on Hill "D"	3	_____
a. Moves with guns traversed to cover exposed flank	1	_____
b. Moves around flank of Hill "A"	1	_____
c. Designates manner of movement	1	_____
(12) Moves base of fire section across ford and takes up position on Hill "C"	2	_____
a. Moves with guns traversed to cover exposed flank	1	_____
b. Moves around flank of Hill "A"	1	_____
c. Designates manner of movement	1	_____

PROBLEM II - (Continued) (Solution and Scoring Sheet)

	<u>Value</u>	<u>Score</u>
(13) Moves entire platoon directly across ford	2	_____
a. Moves with guns traversed to cover exposed flank	1	_____
b. Moves around flank of Hill "A"	1	_____
c. Leading section takes position on Hill "C"	2	_____
d. Leading section takes position on Hill "D"	1	_____
e. Trailing section takes position on Hill "D"	2	_____
f. Trailing section takes position on Hill "C"	1	_____
g. Designates manner of movement across ford	1	_____
(14) Reports, "Mission Accomplished"	1	_____
(15) No enemy gun ordered to fire by INSTRUCTOR	5	_____
(16) ONE enemy gun ordered to fire by INSTRUCTOR	3	_____
(17) Any other action taken by the platoon leader other than designated in the "Score Sheet" is worth ONE point in the entire action taken	1	_____
(18) Completes problem with NO tank losses	15	_____
(19) Completes problem with ONE tank loss	10	_____
(20) Completes problem with TWO tank losses	5	_____
(21) Completes problem with THREE tank losses	2	_____
(22) Completes problem with FOUR tank losses	1	_____
POSSIBLE SCORE	61	
SCORE MADE	_____	
(23) Deduct FIVE points from SCORE MADE if incorrect radio procedure was habitually used.	5	_____
TOTAL SCORE	_____	

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) and
paragraph 273, (attack order)

FM-17-33 Paragraphs 5a, 6, 22, 26b, 37, 38, 41, 44b, 50, 51, 58, 60,
63, 83, 91, 92, 94, 95, 96b, 99, 100

PROBLEM III - Movement Through Semi-Close Terrain; Reconnaissance by Fire;
Target Designation: Control of Fire

1. GENERAL

a. Terrain. The terrain will be duplicated, in general, as shown on MAP "A"; however, location of features containing enemy weapons will be constructed and sited exactly as indicated. The curtain will be open to permit a view of the entire terrain board.

b. Enemy. The enemy will consist of five tanks and two AT guns, located and sited as shown on MAP "A". All enemy weapons will be concealed from view. None of the enemy weapons will be moved; however, they will be fired as directed by the INSTRUCTOR. ASSISTANT INSTRUCTORS will actually fire the weapons; each firing will be accompanied by "cracker-ball" ammo, which also will be fired by ASSISTANT INSTRUCTORS on order of the INSTRUCTOR. Each enemy tank will be ordered to fire by number (See MAP "A"). Enemy casualties will be assessed by the INSTRUCTOR (See paragraph 2).

c. Test Platoon. The problem begins with the Test Platoon in position and formation as shown on MAPS "A" and "B". The INSTRUCTOR will issue to the platoon leader the oral operation order (See paragraph 3) and five copies of MAP "B". The platoon leader will be given 15 minutes to complete his visual and map reconnaissance, brief his platoon, and issue his attack order. The problem will be "free play" as far as the Test Platoon is concerned. Casualties may be assessed by the INSTRUCTOR by use of his spot light; however, in general, casualties will occur naturally if the platoon leader employs faulty techniques and tactics. These casualties will come as a result of the INSTRUCTOR control of enemy weapons (See paragraph 1b above). All Test Platoon tanks destroyed by enemy action will remain out of action for the duration of the problem. In the event the platoon leader becomes a casualty, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon leader and platoon sergeant become casualties, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but with platoon communications to the remaining tanks.

d. The Instructor. The INSTRUCTOR will be responsible for being completely familiar with this entire document. In addition, he will act as the Test Platoon leader's team commander, and as controller of the enemy (See paragraph 1b above). He will control the firing of the AT guns in WOODS "C" and "D" from the control panel; he will control the fire of enemy tanks (See MAP "A") through his ASSISTANT INSTRUCTORS, to include activation of "cracker-ball" ammo. The INSTRUCTOR will begin the problem by conferring with the platoon leader on the floor in front of the control platform. (All other platoon personnel will be assembled behind the control platform where they cannot overhear the INSTRUCTOR, or view the terrain complex.) The INSTRUCTOR will then orally issue the Operation Order (See paragraph 3) and five copies of MAP "B" to the platoon leader. No instructions, other than the order, will be given to the platoon leader except to clarify the intent of Operation Order if the platoon leader requests specific clarification of certain aspects within the order. The platoon leader will notify the INSTRUCTOR when ready to start the movement; the INSTRUCTOR orders "MOVE OUT." The ASSISTANT INSTRUCTOR will plot all Test Platoon moves on a copy of MAP "A". If the platoon loses four (4) tanks to enemy action before the

PROBLEM III - (Continued)

problem is completed, the INSTRUCTOR will appoint another platoon leader and run the problem again WITHOUT benefit of a critique. A critique will be conducted only if the problem is completed. Although the Battalion Mortar Platoon will be in general support of the team, the INSTRUCTOR will deny the Test Platoon support fire, if platoon leader should request support fires--"SUPPORT FIRE NOT AVAILABLE, FIRING ANOTHER MISSION," or words to that effect.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the platoon is to advance north, using GRIGGS ROAD as the axis of advance, and secure the far and near approaches to the bridge over FLOYD RIVER.

b. Platoon Movement. The platoon will be located as shown on MAPS "A" and "B". The platoon will move as directed by the platoon leader. He employs any formation or method of advance he chooses. He will be responsible for all his platoon does or fails to do.

c. Enemy Action. Enemy action will be controlled by the INSTRUCTOR through his ASSISTANT INSTRUCTORS. If the platoon (or individual tanks thereof) fail to reconnoiter any feature harboring an enemy weapon, the enemy weapon will fire at the offending tank as it exposes its flank to the concealed enemy gun. If, however, any feature hiding any enemy weapon is reconnoitered by fire, the enemy gun will be assessed as "dead", even if in the process of firing. What happens will happen naturally. No enemy tanks will be moved. "Cracker-ball" ammo will be employed by the ASSISTANT INSTRUCTORS to alert the Test Platoon that they are under fire.

d. Termination of Problem.

(1) Problem terminates when:

(a) Test Platoon leader informs team commander (INSTRUCTOR), "Mission Accomplished," or words to that effect.

(b) Test Platoon has lost four (4) tanks to enemy action.

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty equipment (NOT the fault of the operator).

(b) Test Platoon communications net is inoperative, excluding tank interphone or operator deficiency.

(c) INSTRUCTOR deems it necessary to prevent excessive damage to equipment (miniature tanks or terrain features).

NOTE: None of the above information will be given to the Test Platoon personnel.

PROBLEM III - (Continued)

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of MAP "B")

a. AN ENEMY FORCE, STRONG IN ARMOR, IS REPORTED MOVING SOUTH ALONG GRIGGS ROAD. THIS ENEMY FORCE IS MOVING SLOWLY, AND IS ABOUT 20 MILES NORTH OF FLOYD RIVER (OFF THE MAP). HOWEVER, AT DUSK LAST NIGHT, AN ENEMY ARMOR FORCE ESTIMATED AT PLATOON STRENGTH WAS OBSERVED JUST NORTH OF FLOYD RIVER BY AN ARMY AIR OBSERVATION PLANE. THIS MORNING, FRIENDLY AIR RECON NAISSANCE REPORTS NO SIGHTING, OR TRACE, OF THIS ENEMY PLATOON ANYWHERE IN THE AREA.

b. OUR TEAM IS MOVING NORTH, THREE PLATOONS ON LINE, WITH THE MISSION OF SECURING CROSSING SITES OVER THE FLOYD RIVER.

1ST PLATOON IN THE CENTER

2D PLATOON ON THE LEFT (WEST)

3D PLATOON ON THE RIGHT (EAST)

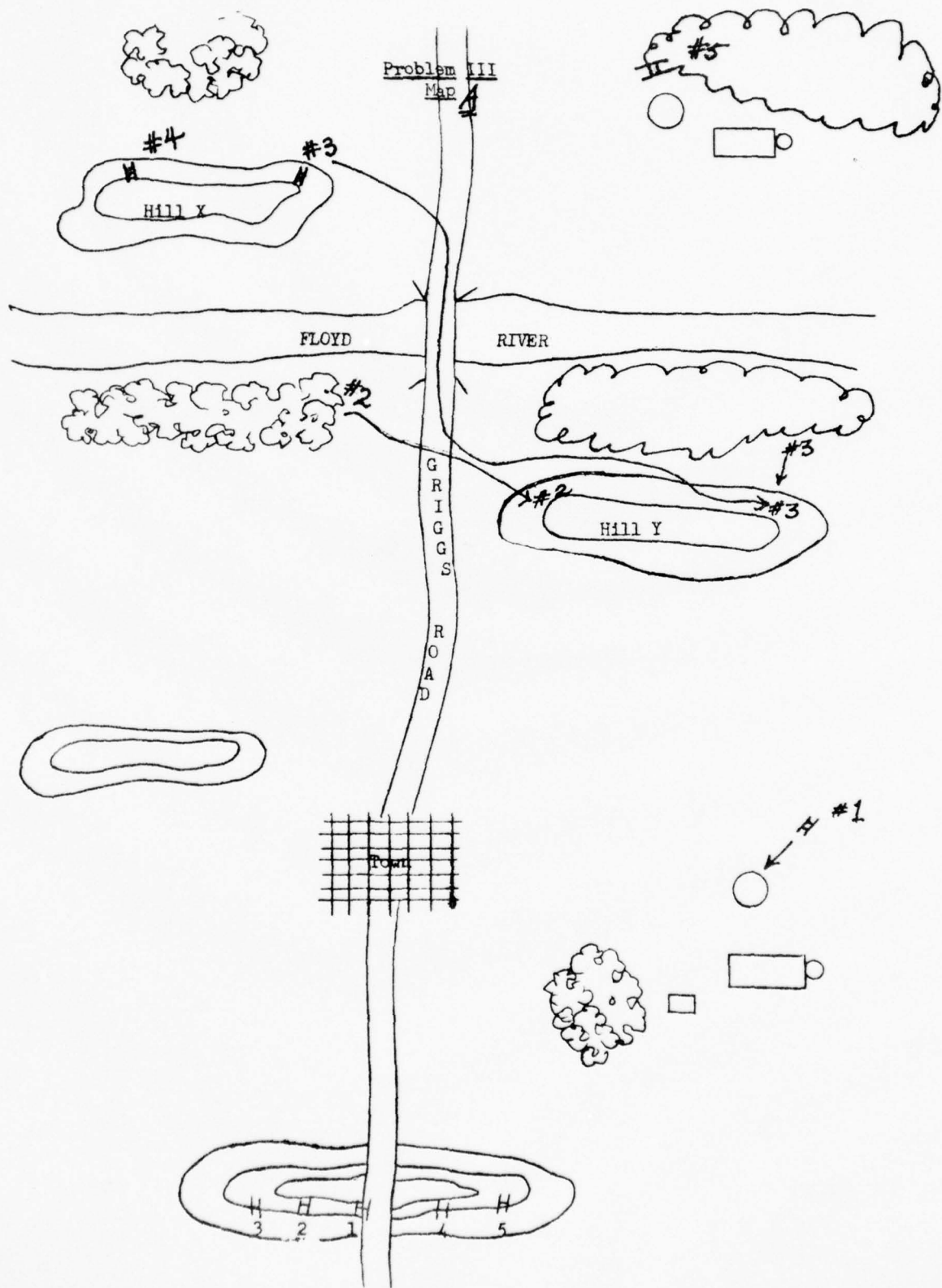
FIRST PLATOON, YOU WILL ATTACK IN 15 MINUTES, WITH THE MISSION OF SECURING THE FAR AND NEAR APPROACHES TO THE BRIDGE OVER FLOYD RIVER. THE BATTALION MORTAR PLATOON WILL BE IN GENERAL SUPPORT OF OUR TEAM. YOU WILL NOT HAVE ANY ATTACHMENTS.

c. I WILL BE WITH THE 1ST PLATOON INITIALLY.

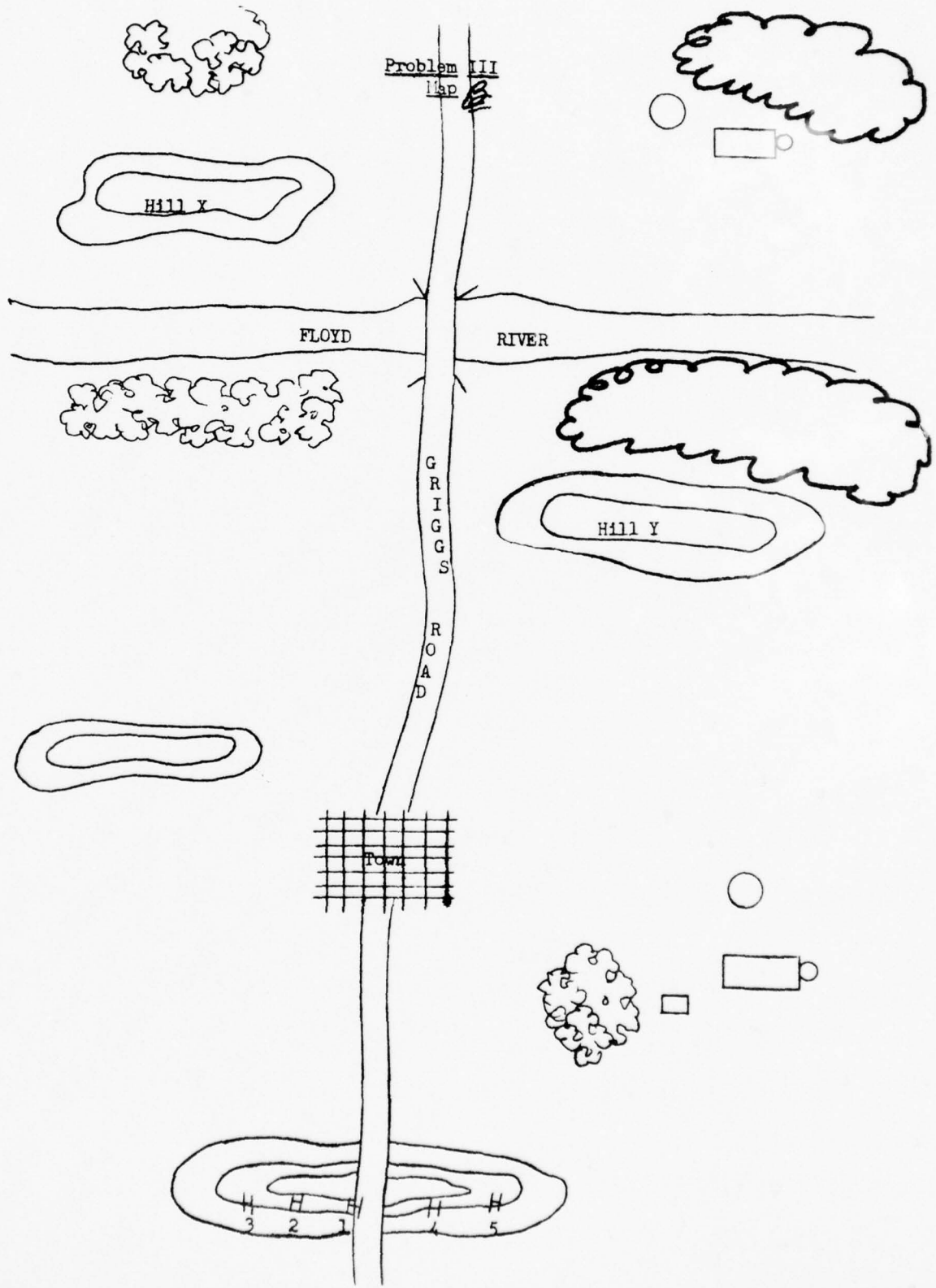
ARE THERE ANY QUESTIONS?

THE TIME IS NOW _____ HOURS.

REPORT WHEN YOU ARE READY TO MOVE.



Problem III
Map



PROBLEM III - (Continued)

4. SOLUTION AND SCORING

	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon attack order, and mentions	1	_____
(a) Enemy force	1	_____
Strength (Armor platoon)	1	_____
Previous location (North of <u>FLOYD RIVER</u>)	1	_____
Present location (unknown)	1	_____
(b) Friendly force	1	_____
Platoon mission (Secure both approaches to bridge)	1	_____
Platoon position in the attack, (center)	1	_____
Fire support (Battalion Mortar Platoon in General Support)	1	_____
Attachments (NONE)	1	_____
Scheme (plan) of movement and attack	1	_____
Report when ready	1	_____
(6) Moved from column into wedge formation	2	_____
(7) Moved from column into line formation	1	_____
(8) Continued in column up <u>GRIGGS ROAD</u>	$\frac{1}{2}$	_____
(9) Moved toward objective in wedge formation, reconnoitering by fire as he goes	4	_____
(10) Moved toward objective in line formation, reconnoitering by fire as he goes	3	_____
(11) Moved toward objective by bounds, either in line or loose wedge	2	_____
(a) Designates manner of movement	1	_____

PROBLEM III - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(12) Moved toward objective in column	1	_____
(13) Reconnoitered by fire WOODS "A"	1	_____
(14) Reconnoitered by fire WOODS "B"	1	_____
(15) Reconnoitered by fire WOODS "C"	1	_____
(16) Reconnoitered by fire HOUSE NR 1	1	_____
(17) Reconnoitered by fire BARN "E"	1	_____
(18) Reconnoitered by fire BARN "F"	1	_____
(19) Reconnoitered by fire HOUSE NR 2	1	_____
(20) Reconnoitered by fire WOODS "H"	1	_____
(21) Reconnoitered by fire WOODS "D"	1	_____
(22) Reconnoitered by fire HOUSE NR 3	1	_____
(23) Reconnoitered by fire BARN "G"	1	_____
(24) Reconnoitered by fire all HAYSTACKS in FIELD "X"	2	_____
(25) Reconnoitered by fire all HAYSTACKS in FIELD "Y"	2	_____
(26) Reconnoitered by fire all HAYSTACKS in FIELD "Z"	2	_____
(27) Gave orders for section on right to reconnoiter by fire everything to their right and right front	1	_____
(28) Gave orders for section on left to reconnoiter by fire everything to their left and left front	1	_____
(29) Alerted his crew to observe and reconnoiter by fire to the front and sides	1	_____
(30) Moves platoon to HILL "Y"	2	_____
(31) Sends one section to HILL "Y"	1	_____
(a) Designates manner of movement	1	_____
(32) Sends one section to HILL "X"	1	_____
(a) Designates manner of movement	1	_____
(33) Reports MISSION ACCOMPLISHED	1	_____

PROBLEM III - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(34) Any other action taken by the platoon leader besides that designated on the Score Sheet is worth one point for the entire action taken	1	_____
(35) Completes the problem with NO tank losses	15	_____
(36) Completes the problem with ONE tank loss	10	_____
(37) Completes the problem with TWO tank losses	5	_____
(38) Completes the problem with THREE tank losses	2	_____
(39) Completes the problem with FOUR tank losses	1	_____

POSSIBLE SCORE 62

SCORE MADE _____

(40) Deduct five (5) points from SCORE MADE if incorrect radio procedure was <u>habitually</u> used.	5	_____
--	---	-------

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) and paragraph 273, (attack order) and 281.

FM-17-33 Paragraphs 5a, 6, 22, 26b, 37, 38, 41, 44b, 49, 51, 58, 60, 83, 91, 92, 94, 95, 96b, 99, 100.

PROBLEM IV - Advance Against Scattered but Mutually Supporting Enemy Forces; Using Terrain to the Best Advantage; Attack and Seize the Critical Terrain

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on MAP "A". The curtain will be open to permit a view of the entire terrain board. WOODS "S" and "X" must permit passage of tanks.

b. Enemy. The enemy will consist of five (5) tanks and two AT guns, located and sited as shown on MAP "A." The two enemy tanks on HILLS "O" and "H," respectively, will be in firing positions and will be moved as required (see paragraph 2). Each enemy tank will be ordered to fire and move as directed by the INSTRUCTOR, who will use tank number as identification (See MAP "A"). The two AT guns located in BARNS "A" and "B" will be fired by the INSTRUCTOR from his control panel. Enemy casualties will be assessed by the INSTRUCTOR, in addition to those which may occur due to Test Platoon action. "Cracker-ball" ammo will be used as directed by the INSTRUCTOR to indicate enemy fire on the Test Platoon.

c. Test Platoon. The problem begins with the Test Platoon in position and formation (line) as shown on MAPS "A" and "B." The INSTRUCTOR will issue to the platoon leader the oral Operation Order (See paragraph 3) and five copies of MAP "B." The platoon leader will then be given 15 minutes to complete his reconnaissance (visual and map), brief his platoon, and issue his platoon attack order. The problem will be "free play" as far as the Test Platoon is concerned. Casualties may be assessed by the INSTRUCTOR with the use of his spot light; however, in general, casualties will occur naturally if the platoon leader employs faulty techniques and tactics. (These casualties will come as a result of INSTRUCTOR control of enemy weapons--See paragraph 1b above.) All Test Platoon tanks destroyed by enemy action will remain out of action for the duration of the problem. In the event the platoon leader becomes a casualty, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon leader and platoon sergeant become casualties, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR--See paragraph 1d), but retaining communications over the platoon net with the remaining tanks.

NOTE: The INSTRUCTOR (team commander) will not respond to any calls from any tank other than the platoon leader and platoon sergeant tanks.

d. The Instructor. The INSTRUCTOR will be responsible for being completely familiar with this entire document. In addition, the INSTRUCTOR will act as the Test Platoon team commander, and as controller of the enemy (See paragraph 1b above). The INSTRUCTOR will control the firing of the enemy AT guns in BARNS "A" and "B" from his control panel; he will also control the firing of SMOKE, which will be pre-set on HILLS "O" and "L." Enemy tanks on HILLS "H" and "O" will be operated by ASSISTANT INSTRUCTORS and will move and fire as directed by the INSTRUCTOR. (See MAP "A.") ASSISTANT INSTRUCTORS will also provide "cracker-ball" ammunition for both friendly fire support and enemy fire, as directed by the INSTRUCTOR. The INSTRUCTOR will begin the problem by conferring with the platoon leader on the floor in front of the control platform. (All other Test Platoon

PROBLEM IV - (Continued)

personnel will be assembled behind the control platform where they cannot overhear the INSTRUCTOR, or view the terrain complex.) The INSTRUCTOR will then orally issue the Operation Order (See paragraph 3) and five (5) copies of MAP "B" to the platoon leader. No instructions, other than the order, will be given to the platoon leader, except to clarify the intent of the Operation Order if the platoon leader requests specific clarification of certain aspects within the Order. The platoon leader will notify the INSTRUCTOR when ready to start the movement; the INSTRUCTOR orders "MOVE OUT." The ASSISTANT INSTRUCTOR will plot all Test Platoon moves on a copy of MAP "A." If the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint another platoon leader and run the problem again WITHOUT benefit of a critique, after renewing the SMOKE charges on HILLS "O" and "L" if necessary. A critique will be conducted ONLY if the problem is completed.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the platoon is to advance north, seize and hold HILLS "O" and "L."

b. Platoon Movement. The platoon will be located as shown on MAPS "A" and "B." The platoon will move as directed by the platoon leader. He will employ any combat formation and method of movement he desires.

c. Enemy Action. Enemy action will be controlled by the INSTRUCTOR through the ASSISTANT INSTRUCTORS. Regardless of the Test Platoon formation, or method of movement, if the platoon fails to reconnoiter enemy occupied positions AND exposes the flanks of tanks to the enemy AT guns, the INSTRUCTOR will fire the AT guns thus ignored (using "cracker-ball" ammo to alert the platoon to the fact they are being fired upon) and attempt to knock out the offending tanks. If the platoon leader returns this fire, the INSTRUCTOR will cease firing the AT guns and assess the enemy weapon as destroyed. If the Test Platoon moves right (east), enemy tanks 1 and 2 on HILL "H" will be ordered to fire. If the Test Platoon calls for artillery on HILL "H" or sets up a base of fire section and maneuvers toward HILL "H," the INSTRUCTOR will order enemy tanks 1 and 2 to move back to HILL "L." (Test Platoon tanks have an opportunity to kill these enemy tanks and vice versa.) If the Test Platoon moves left (west), enemy tanks on HILL "O" will be ordered to fire, and enemy tanks on HILL "H" will be moved back to HILL "L" (SEE MAP "A.") The Test Platoon can smoke both HILL "O" and "L." If the Test Platoon is EAST (right) and uses smoke and attacks HILL "L," the enemy will depart HILLS "O" and "L;" if the platoon is WEST (left) and uses smoke and attacks HILL "O," the enemy will depart HILLS "O" and "L;" however, if he attacks HILL "L" from the left (west), or HILL "O" from the right (east), the INSTRUCTOR will knock out sufficient Test Platoon tanks to cause the problem to be terminated by causing the enemy tanks, across whose front the maneuver element must pass, to move to the ends of the HILLS, out of the smoke, and place flanking fire on the maneuver element.

d. Termination of the Problem.

PROBLEM IV - (Continued)

(1) Problem terminates when:

(a) Test Platoon leader informs team commander (INSTRUCTOR)
"Mission Accomplished."

(b) Test Platoon has lost four (4) tanks to enemy action.

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty equipment (NOT fault of operator).

(b) Test Platoon communications net is inoperative, excluding tank interphone or operator deficiency.

(c) INSTRUCTOR deems it necessary to prevent excessive damage to equipment (miniature tanks or terrain features).

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of MAP B).

a. AN ENEMY ARMOR FORCE IS CONDUCTING A DELAYING ACTION, USING HALL ROAD AS THEIR AXIS OF MOVEMENT TO THE NORTH. FRIENDLY AIR RECONNAISSANCE REPORTS TWO (2) ENEMY TANKS ON HILL "H" AND TWO (2) ENEMY TANKS ON HILL "O." NO OTHER ENEMY WAS SEEN.

b. OUR TEAM HAS BEEN ATTACKING NORTH AGAINST SCATTERED, BUT ORGANIZED, RESISTANCE. WE ARE TO CONTINUE TO PLACE PRESSURE ON THE ENEMY, TO GIVE HIM NO TIME TO CONSOLIDATE A DEFENSIVE POSITION. TO ACCOMPLISH OUR MISSION, OUR TEAM WILL ATTACK IN 15 MINUTES WITH THREE PLATOONS ABREAST.

1ST PLATOON ON THE RIGHT (EAST)
2D PLATOON ON THE LEFT (WEST OFF MAP)
3D PLATOON IN THE CENTER (OFF MAP TO THE WEST)

FIRST PLATOON, YOUR MISSION IS TO ATTACK NORTH, USING HALL ROAD AS YOUR AXIS OF ADVANCE, TO SEIZE AND HOLD HILLS "O" AND "L." BE PREPARED TO CONTINUE THE ADVANCE ON ORDER.

BATTALION MORTAR PLATOON WILL BE IN GENERAL SUPPORT OF OUR TEAM, BUT YOU WILL NOT HAVE ANY ATTACHMENTS.

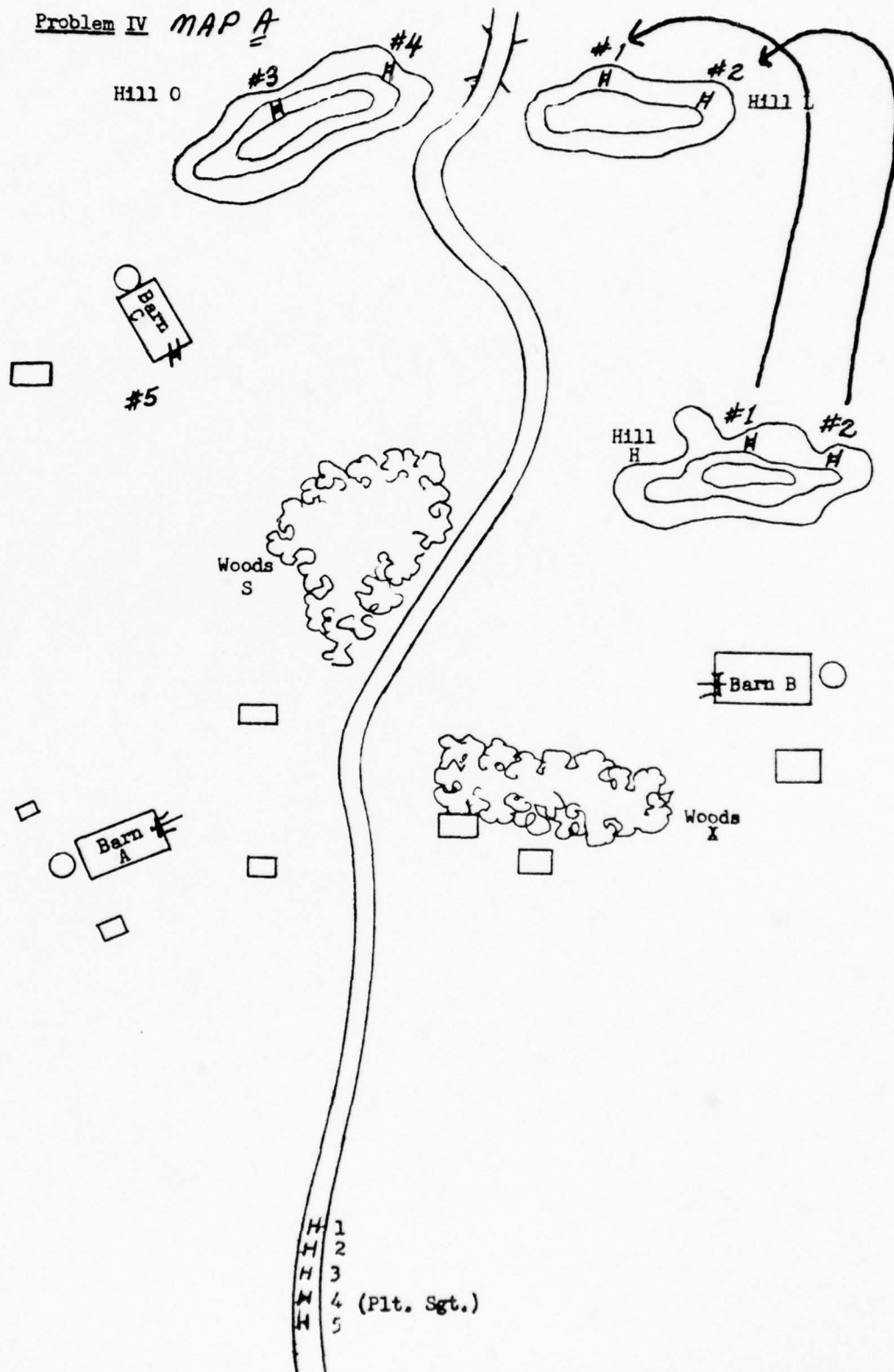
c. I WILL BE WITH THE 2D PLATOON INITIALLY.

ARE THERE ANY QUESTIONS?

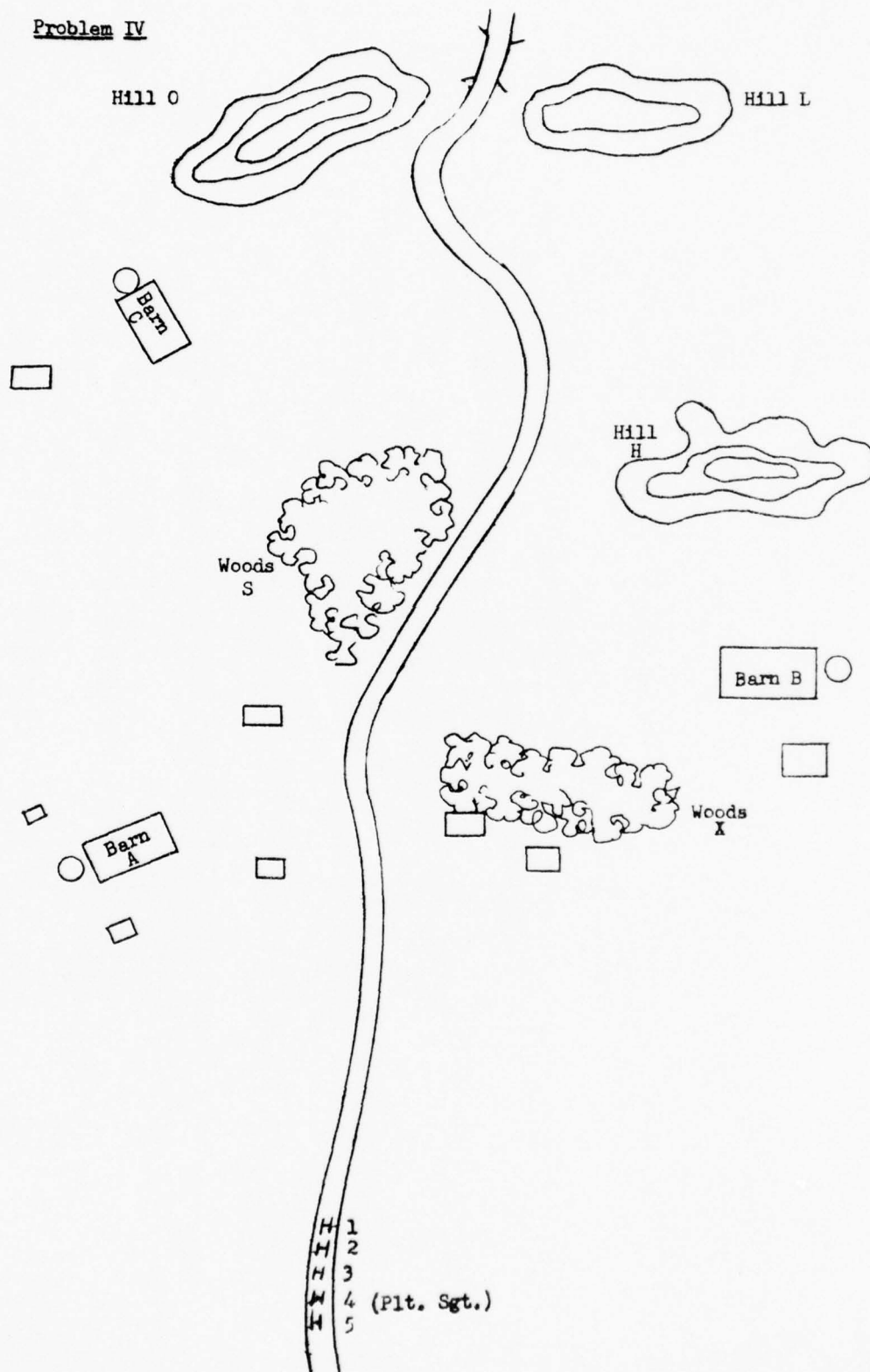
THE TIME IS NOW _____ HOURS.

REPORT WHEN YOU ARE READY TO MOVE.

Problem IV MAP A



Problem IV



PROBLEM IV - (Continued)

4. SOLUTION AND SCORING

	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon attack order, and mentions	1	_____
(a) Enemy force	1	_____
(b) Strength (platoon - or 4 tanks)	1	_____
Location (2 tanks on HILLS "O" and "H" respectively)	1	_____
Nature of action (Scattered but organized)	1	_____
(b) Friendly force	1	_____
Platoon mission (seize and hold HILLS "O" and "L")	1	_____
Platoon position in team attack (Center)	1	_____
Fire support (Battalion Mortar Platoon - priority of fires)	1	_____
Attachments (NONE)	1	_____
Scheme (Plan) of attack	1	_____
Report when ready	1	_____
(6) Moves into line or wedge formation	1	_____
(7) Reconnoitered by fire BARN "A"	1	_____
(8) Reconnoitered by fire WOODS "X"	1	_____
(9) Reconnoitered by fire BARN "B"	1	_____
(10) Reconnoitered by fire WOODS "S"	1	_____
(11) Reconnoitered by fire BARN "C"	1	_____
(12) Moves entire platoon along left flank around BARN "A"	6	_____

PROBLEM IV - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(13) Moves entire platoon around BARN "C" to attack HILL "O"	4	_____
(a) Leaves base of fire at WOODS "X"	6	_____
<u>1.</u> Designates tanks as base of fire	1	_____
<u>2.</u> Designates manner of movement	1	_____
(b) Moves section to HILL "O"	1	_____
<u>1.</u> Moves around left flank of BARN "C"	1	_____
<u>2.</u> Designates manner of movement	1	_____
(c) Requests supporting fire on HILL "O"	1	_____
(d) Requests SMOKE on HILL "L"	1	_____
(e) Requests supporting fire on HILL "L"	$\frac{1}{2}$	_____
(f) Lifts supporting fire on reaching HILL "O"	1	_____
(g) Orders base of fire, CEASE FIRE	1	_____
(h) Moves base of fire from WOODS "S" to HILL "O"	1	_____
<u>1.</u> Moves around left flank of BARN "C"	1	_____
<u>2.</u> Designates manner of movement	1	_____
(14) Sets up base of fire in WOODS "X"	1	_____
(a) Designates manner of movement	1	_____
(b) Designates tanks to act as base of fire	1	_____
(15) Moves section around BARN "B" to HILL "H"	2	_____
(a) Requests supporting fire on HILL "H"	1	_____
(b) Designates manner of movement	1	_____
(c) Lifts supporting fire on reaching HILL "H"	1	_____
(d) Orders base of fire, CEASE FIRE	1	_____
(16) Moves base of fire from WOODS "X" to HILL "H"	1	_____
(a) Moves around right flank of BARN "B"	1	_____
(b) Designates manner of movement	1	_____

PROBLEM IV - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(17) Moves maneuver section to HILL "L"	1	___
(a) Requests supporting fire on HILL "L"	1	___
(b) Designates tanks to act as base of fire	1	___
(c) Requests SMOKE on HILL "O"	1	___
(d) Requests supporting fire on HILL "O"	1	___
(e) Moves around right flank of HILL "H"	$\frac{1}{2}$	___
(f) Designates manner of movement	1	___
(g) Lifts supporting fire on HILL "L"	1	___
(h) Shifts base of fire to HILL "O"	1	___
(i) Shifts supporting fire to HILL "O"	1	___
(18) Moves section from HILL "L" to HILL "O"	1	___
(a) Designates manner of movement	1	___
(b) Lifts supporting fire on reaching HILL "O"	1	___
(c) Orders base of fire, CEASE FIRE	1	___
(19) Moves base of fire from HILL "H" to HILL "O"	1	___
(a) Designates manner of movement	1	___
(20) Reports to team commander, MISSION ACCOMPLISHED	1	___
(21) NO enemy gun ordered to fire by the INSTRUCTOR	5	___
(22) ONE enemy gun ordered to fire by the INSTRUCTOR	3	___
(23) Any other action taken by the platoon leader besides those indicated on the Scoring Sheet is worth <u>one</u> point for the entire action	1	___
(24) Completes problem with NO tank losses	15	___
(25) Completes problem with ONE tank loss	10	___
(26) Completes problem with TWO tank losses	5	___
(27) Completes problem with THREE tank losses	2	___
(28) Completes problem with FIVE tank losses	1	___

PROBLEM IV - (Continued) (Solution and Scoring)

POSSIBLE SCORE 71

SCORE MADE

- (29) Deduct five (5) points from SCORE MADE
if incorrect radio procedure was
habitually used.

TOTAL SCORE

FM-17-1 Paragraphs 91 through 93, (estimate of the situation)

Paragraph 273, (attack order) and 281.

FM 17-33 Paragraphs 5a, 6, 22, 26b, 37, 38, 39, 40, 41, 44b, 49, 51, 58,
60, 83, 91, 92, 94, 95, 96b, 99, 100.

PROBLEM V - Operation in Open Terrain; Enemy Occupies Commanding Terrain;
Both Enemy Flanks are Secured by Natural Obstacles and Mines;
Drive Enemy From Commanding Terrain

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on MAP "A". HILLS "X" and "Y" will be inaccessible to tanks. The road will be mined from where the two destroyed tanks are located to a position due left of HILL "E". The curtain will be open to permit a view of the entire terrain board.

b. Enemy. Two enemy tanks and two AT guns will be located on HILL "F". All enemy movements and firing action will be controlled by the INSTRUCTOR. The two enemy tanks will be operated by ASSISTANT INSTRUCTORS; the two AT guns will be fired by the INSTRUCTOR; the enemy mines on the ROAD will be fired by the INSTRUCTOR when any Test Platoon tank crosses the ROAD where the ROAD is mined. The enemy tanks are mobile, the AT guns are stationary. Enemy casualties may be assessed by the INSTRUCTOR; others may occur naturally as platoon takes proper action.

c. Test Platoon. The problem begins with the Test Platoon located as shown on MAPS "A" AND "B". The INSTRUCTOR will issue to the platoon leader the oral Operation Order and five (5) copies of MAP "B". The platoon leader will be given 15 minutes to complete his visual and map reconnaissance, brief his tank commanders, and issue his platoon attack order. The problem will be "free play" as far as the Test Platoon is concerned. Casualties may be assessed by the INSTRUCTOR with use of his spotlight, if the Test Platoon attempts a frontal assault on HILL "F" (NOTE: Frontal assault not to be confused with frontal attack); and when Test Platoon tanks activate mines laid on ROAD. All Test Platoon tanks destroyed by enemy action, or the INSTRUCTOR, will remain out of action for the duration of the problem. In the event the platoon leader becomes a casualty, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon leader and platoon sergeant become a casualty, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but with platoon communications to the remaining tanks.

d. The Instructor. The INSTRUCTOR will be responsible for being completely familiar with this entire document. In addition, he will act as the platoon leader's team commander, and as controller of the enemy. He will control the enemy AT guns and the enemy mined ROAD from his control panel. He will order the enemy tanks to fire and to change position. He will answer all calls from the Test Platoon leader, and will cause ASSISTANT INSTRUCTORS to fire "cracker-balls" to simulate enemy tank fire and artillery fire. He will activate the smoke on HILL "F", if platoon leader requests it, from the control panel. The INSTRUCTOR will begin the problem by conferring with the platoon leader on the floor in front of the control platform. (All other platoon personnel will be assembled behind the control platform where they cannot overhear the INSTRUCTOR and platoon leader.) The INSTRUCTOR will then orally issue the Operation Order (See paragraph 3) and five copies of MAP "B". No instructions other than the

PROBLEM V - (Continued)

order will be given to the platoon leader. No coaching is permitted. The platoon leader will notify the INSTRUCTOR when he is ready to begin. The INSTRUCTOR orders "MOVE OUT." The ASSISTANT INSTRUCTOR will plot all Test Platoon moves on a copy of MAP "A". If a platoon loses four (4) tanks to enemy action (or are knocked out by the INSTRUCTOR'S spot light because of faulty equipment) BEFORE the problem is completed, the INSTRUCTOR will appoint another platoon leader, replace activated mines and smoke element (if necessary), and run the problem again WITHOUT benefit of a critique. A critique will be conducted ONLY if a problem is completed. HILL "F" is the only terrain feature where smoke is available, and only ONE smoke mission will be fired. (Artillery fire is available on all terrain features. So, if the platoon leader requests smoke on HILL "F", the INSTRUCTOR will inform the platoon leader, "SMOKE ON HILL "F", FOR ONLY ONE FIRE MISSION; THE SCREEN CANNOT BE SUSTAINED, SO FIRE IT WHEN YOU WANT IT, BUT TAKE FULL ADVANTAGE OF THE SMOKE YOU GET IMMEDIATELY", or words to that effect.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the Test Platoon is to force the enemy off HILL "F". (See paragraph 3, OPERATION ORDER.)

b. Platoon Movement. The platoon will be situated as shown on MAPS "A" and "B". The platoon will move as directed by the platoon leader. The ROAD is mined with enemy mines and two friendly tanks are blocking the road, having been destroyed by mines. The RIVER SEINE is a dry-bed river, permitting tanks to take hull defiladed positions. Platoon movement will be dependent entirely upon the initiative displayed by the platoon leader, and he will be responsible for all that the platoon does or fails to do.

c. Enemy Action. Enemy action will be controlled by the INSTRUCTOR and ASSISTANT INSTRUCTORS. The two AT guns on HILL "F" will be fired by the INSTRUCTOR, as will the detonation of mines on ROAD. The two tanks on HILL "F" will be moved and fired by ASSISTANT INSTRUCTORS on order of the INSTRUCTOR. All enemy fire will be augmented by the use of "cracker-ball" ammo fired by ASSISTANT INSTRUCTORS. Enemy tanks and AT guns will be ordered to retreat (move off HILL "F") if the Test Platoon leader assaults the HILL around either, or both, flanks. If the Test Platoon frontally assaults HILL "F", the enemy tanks will be ordered to move back off the hill crest and lay in wait for the Test Platoon tanks to expose themselves on the crest. The INSTRUCTOR will cause test tanks which expose their "bellies" to be destroyed by use of the spot light.

d. Termination of Problem. The problem will be terminated (or temporarily suspended) when any of the following conditions exist:

(1) Problem terminates when:

(a) Test Platoon leader calls team commander (INSTRUCTOR) and reports, in essence, "Mission Accomplished."

(b) Test Platoon has lost four (4) tanks to enemy action.

PROBLEM V - (Continued)

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty or malfunctioning equipment (NOT the fault of the operator).

(b) Test Platoon communications net is inoperative, excluding tank interphone or operator deficiency.

(c) INSTRUCTOR deems it necessary to prevent excessive damage to equipment (miniature tanks or terrain features).

NOTE: None of the above information will be given to the Test Platoon personnel.

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of Map B)

a. AN ENEMY ARMOR FORCE OF BATTALION SIZE HAS BEEN RETREATING NORTH FOR SEVERAL DAYS BEHIND A STRONG DELAYING ELEMENT. HE HAS NOW OCCUPIED PREPARED DEFENSIVE POSITIONS. FOR EXAMPLE, YOU CAN SEE TWO FRIENDLY TANKS ON ROAD WHICH WERE LOST TO ENEMY EMPLACED MINES. WOODS "A" AND "C" AND HILLS "B" AND "E" ARE NOT OCCUPIED BY THE ENEMY. HOWEVER, TWO ENEMY TANKS AND TWO AT GUNS ARE LOCATED ON HILL "F".

b. OUR TEAM WILL ATTACK NORTH IN 20 MINUTES, WITH TWO PLATOONS ABREAST.

1ST PLATOON ON THE LEFT (WEST).

2D PLATOON ON THE RIGHT (EAST) OFF THE MAP.

3D PLATOON WILL FOLLOW THE 2D PLATOON.

FIRST PLATOON, YOUR MISSION IS TO FORCE THE ENEMY OFF HILL "F". DO NOT OCCUPY THE OBJECTIVE. THE BATTALION MORTAR PLATOON WILL BE IN GENERAL SUPPORT OF OUR TEAM. YOU WILL NOT HAVE ANY ATTACHMENTS.

SECOND PLATOON,

*

*

*

THIRD PLATOON,

*

*

*

c. I WILL BE WITH THE 3D PLATOON INITIALLY.

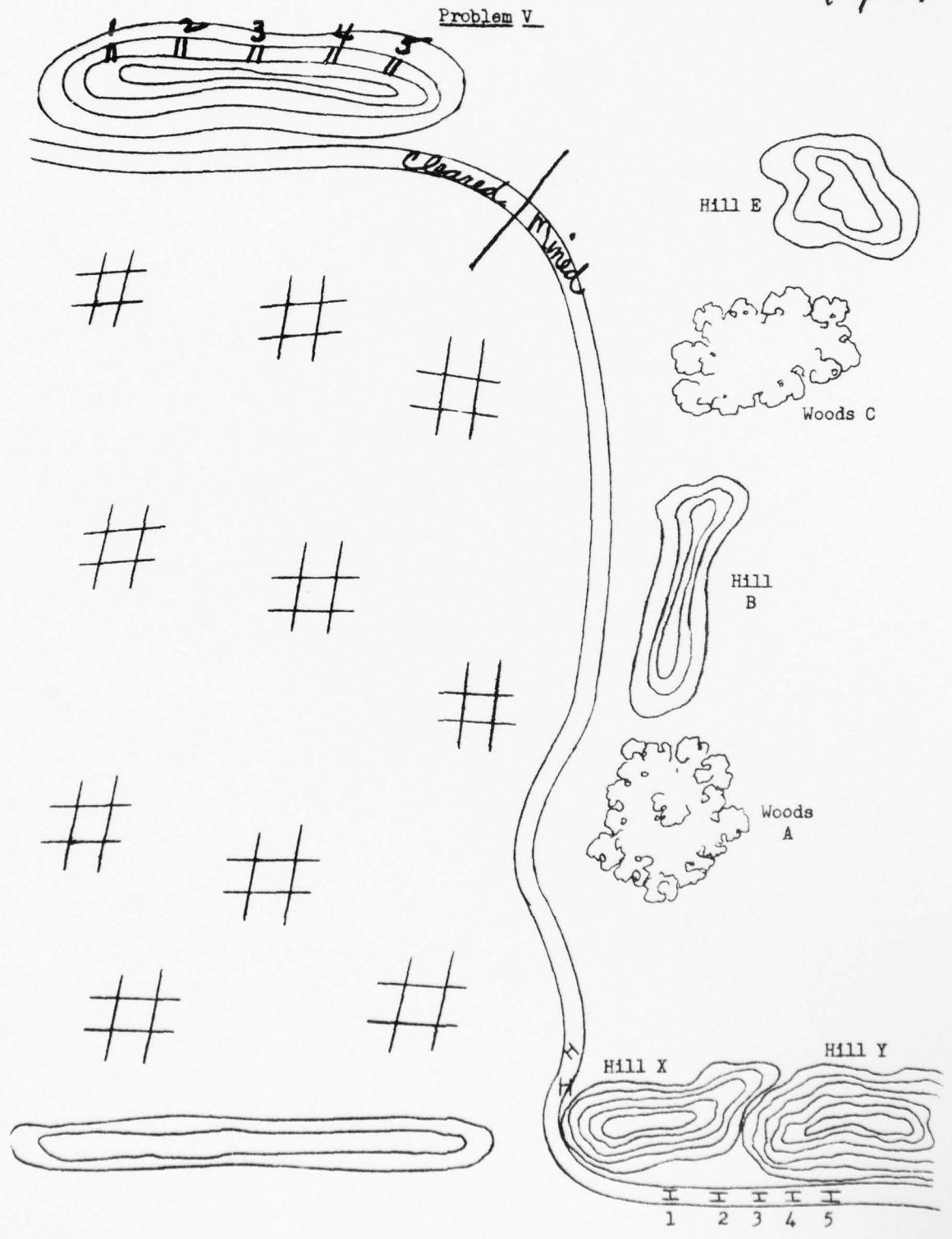
ARE THERE ANY QUESTIONS?

THE TIME IS NOW _____ HOURS.

REPORT WHEN YOU ARE READY TO MOVE.

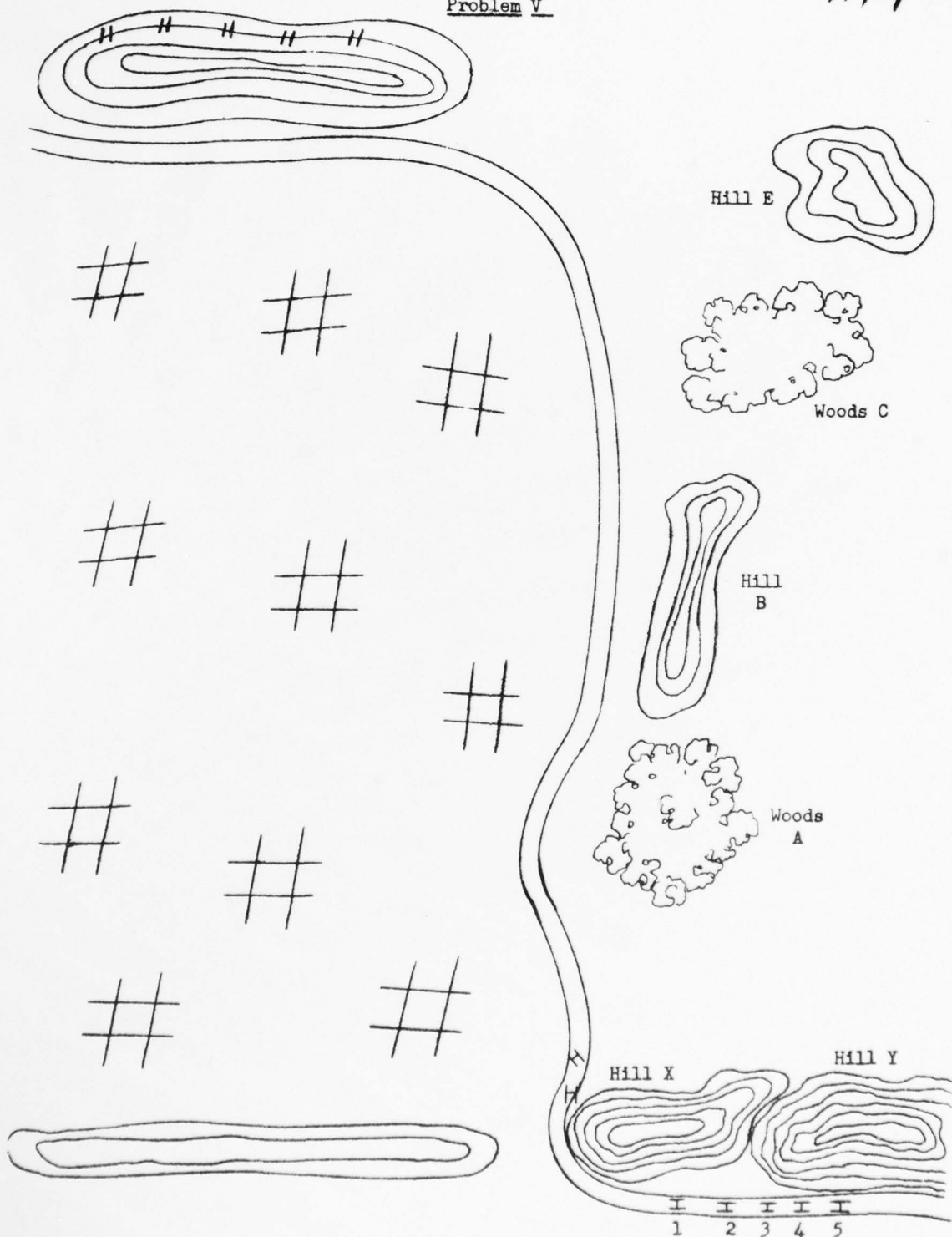
Map A

Problem V



Map B

Problem V



PROBLEM V - (Continued)

4. SOLUTION AND SCORING	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon attack order, and mentions	1	_____
(a) Enemy force	1	_____
Strength (2 tanks, 2 AT guns)	1	_____
Location (on HILL "F")	1	_____
Capability (Defend fortified positions - prepared)	1	_____
(b) Friendly force	1	_____
Platoon mission (Force enemy from HILL "F")	1	_____
Platoon position in team attack (on left - west)	1	_____
Other platoon positions (2d on right, 3d follow 2d)	1	_____
Fire support available (Battalion Mortar Platoon in general support)	1	_____
Attachments (NONE)	1	_____
Scheme of movement (plan of attack)	1	_____
Report when ready	1	_____
(6) Requests supporting fire on HILL "F"	1	_____
(7) Moves platoon into the River bed	3	_____
(a) Designates manner of movement	1	_____
(8) Moves section into the River bed	1	_____
(a) Designates manner of movement	1	_____
(9) Moves all tanks toward HILL "F" in line	1	_____

PROBLEM V - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(10) Formation zig-zagged as they moved	2	_____
(a) Orders section in River bed to open fire on HILL "F"	$\frac{1}{2}$	_____
(11) Moves section from behind HILL "X" into the open in line formation, zig-zagging as they move	1	_____
(a) Designates manner of movement	1	_____
(12) Moves all tanks in line formation toward HILL "F"	$\frac{1}{2}$	_____
(13) Moves section from behind HILL "X" into the open in line formation toward HILL "F"	$\frac{1}{2}$	_____
(a) Designates manner of movement	$\frac{1}{2}$	_____
(14) Moves section in River bed out in line formation, zig-zagging as they move	1	_____
(15) Moves section in River bed out in line formation toward HILL "F"	$\frac{1}{2}$	_____
(16) Requests smoke on HILL "F" before moving his tanks into the attack formation	1	_____
(17) Makes frontal attack on HILL "F" after enemy pulls back	1	_____
(18) Lifts artillery upon reaching HILL "F" in frontal attack	1	_____
(19) Sends base of fire to HILL "F" after enemy pulls back	2	_____
(a) Designates tanks to act as base of fire	1	_____
<u>1.</u> Flanks HILL "F" with other section	1	_____
<u>a.</u> Moves in echelon left or column formation	1	_____
<u>b.</u> Had all guns traversed to cover HILL "F" line formation	1	_____
<u>c.</u> Lifts artillery on HILL "F" for base of fire section	1	_____
<u>2.</u> Designates manner of movement	1	_____

PROBLEM V - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(20) Flanks both ends of HILL "F" after enemy pulls back	3	_____
(a) Moved in echelon right or left or column, depending on which section	1	_____
(b) Had guns traversed to cover HILL "F" while flanking	1	_____
(c) Designated manner of movement	1	_____
(d) Continued artillery while making flank move	1	_____
(21) Reports to team commander	1	_____
(22) Any other action taken by the platoon leader besides that designated in the Scoring Sheet is worth <u>one</u> point for the entire action taken	1	_____
(23) Completes problem with NO tank losses	15	_____
(24) Completes problem with ONE tank loss	10	_____
(25) Completes problem with TWO tank losses	5	_____
(26) Completes problem with THREE tank losses	2	_____
(27) Completes problem with FOUR tank losses	1	_____
POSSIBLE SCORE	48	
SCORE MADE	_____	
(28) Deduct five (5) points from SCORE MADE if incorrect radio procedure is habitually used.		

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) and paragraph 273, (attack order) and 281.

FM-17-33 Paragraph 5a, 6, 22, 26b, 37, 38, 39, 40, 41, 44b, 49, 51, 58, 60, 83, 91, 92, 94, 95, 96b, 99, 100.

PROBLEM VI - Advance Through Close Terrain; Seize and Dominate Terrain;
Coordinate Support Fires; Occupy Objective Against a
Maneuvering Enemy

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on Map "A". WOODS "X" and "Y" will be impassable to tanks, forcing the Test Platoon to move right or left of HILL "A". The curtain will be open, thereby permitting a view of the entire terrain complex.

b. Enemy. Enemy tanks and AT guns will be located and sited as shown on Map "A". All enemy movements and action will be controlled by the INSTRUCTOR through ASSISTANT INSTRUCTORS who will move the enemy tanks as ordered. The INSTRUCTOR will personally control the fire of the AT guns located in WOODS "X" and "Y". In the event any Test Platoon tanks move between HILL "A" and WOODS "X" and "Y" without first reconnoitering the woods by fire, the INSTRUCTOR will cause the AT guns to open fire. "Cracker-ball" ammo will also be used in conjunction with all enemy fire. Enemy tanks will respond to INSTRUCTOR commands by their number designation and will move on order, as indicated on Map "A". Casualties may be assessed by the INSTRUCTOR; others will occur normally as the Test Platoon takes proper action.

c. Test Platoon. The problem will begin with the platoon located and organized as depicted on Maps "A" and "B". The Test Platoon leader will then be given 15 minutes to complete his visual and map reconnaissance, brief his tank commanders, and issue the platoon attack order. The problem will be "free play" as far as the Test Platoon is concerned and casualties will NOT be assessed, but will occur normally if the platoon leader employs faulty tactics and techniques. All Test Platoon tanks knocked out by enemy action will remain out of action for the duration of the problem. In the event the platoon leader's tank is destroyed, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon sergeant and the platoon leader are casualties the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but with platoon communications to the remaining tanks.

d. The Instructor. The INSTRUCTOR is responsible for being completely familiar with this entire document. In addition, he will act as the Test Platoon team commander, and controller of enemy action. The INSTRUCTOR will answer all calls from the platoon leader, and will direct his ASSISTANT INSTRUCTORS to place artillery fire ("cracker-ball" ammo) on areas designated by the platoon leader. Any platoon leader request for SMOKE will be supplied by the INSTRUCTOR from the INSTRUCTOR control panel, if SMOKE is available for the area designated. If no SMOKE is available, the INSTRUCTOR (team commander) will so inform the platoon leader when the request is made. The INSTRUCTOR will begin the problem by conferring with the platoon leader on the floor in front of the control platform. (All other platoon personnel will be assembled behind the control platform where they cannot overhear the INSTRUCTOR and platoon leader.) The INSTRUCTOR will then orally issue the Operation Order and give the platoon leader five (5) copies of Map "B". No

PROBLEM VI - (Continued)

instructions, other than the order, will be given to the platoon leader. No coaching is permitted. After the platoon leader has issued his platoon order and informs the INSTRUCTOR he is ready, the INSTRUCTOR will order, "MOVE OUT." The ASSISTANT INSTRUCTOR will plot all platoon moves on a copy of Map "A". If a platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint a new platoon leader and the problem will be run again WITHOUT benefit of a critique. A critique will be conducted only if a problem has been completed. The INSTRUCTOR will place SMOKE on the HILLS as called for, or artillery fire on all HILLS as called for. However, HILLS "B", "C", and "D" can only be smoked once, so the INSTRUCTOR will inform the platoon leader (if SMOKE is requested) that "THE SMOKE SCREEN CANNOT BE SUSTAINED: TAKE FULL ADVANTAGE OF THE SMOKE YOU DO GET IMMEDIATELY," or words to that effect.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the Test Platoon is to seize and occupy HILL "E". (See paragraph 3, Operation Order.)

b. Platoon Movement. The platoon will move as directed by the platoon leader. He will be responsible for all his platoon does or fails to do. Platoon movement and action will be motivated by the action of the enemy.

c. Enemy Action. Enemy action will be controlled by the INSTRUCTOR. The two (2) enemy tanks on HILL "A" will fire, on order of the INSTRUCTOR, at the Test Platoon tanks as the platoon moves toward HILL "A". (This fire will be augmented with "cracker-ball" ammo to alert the platoon that they are under fire.) The two enemy tanks on HILL "A" will immediately move back to HILLS "B" and "C", as portrayed on Map "A". If, during the Test Platoon's move around HILL "A", the platoon fails to reconnoiter WOODS "X" or "Y", the INSTRUCTOR will cause the AT guns to fire (using "cracker-ball" ammo).

(1) If the Test Platoon smokes HILL "C" and attacks HILL "B", the enemy tanks on these two hills will be ordered by the INSTRUCTOR to move back to HILL "E".

(2) If the Test Platoon smokes HILL "B" and attacks HILL "C", the enemy tanks on HILL "B" will remain in place, and enemy tanks on HILL "C" will be ordered to move to HILL "E". Enemy tanks on HILL "B" will not be moved back, and will fire on Test Platoon tanks until the Test Platoon fire actually knocks out the enemy tanks on HILL "B", or the Test Platoon tanks are destroyed by the combined fire of enemy tanks on HILL "B" and HILL "E", when in position. (Problem develops into a slugging match.)

(3) If the Test Platoon smokes HILL "B" and HILL "C" and moves to HILL "D", the enemy tanks will be ordered to move back to HILL "E". The INSTRUCTOR will destroy two enemy tanks by use of the spot light if the Test Platoon can bring fire to bear from HILL "D" into flank of retreating enemy.

(4) The INSTRUCTOR will deny the Test Platoon the use of SMOKE on HILL "E". Enemy tanks will be ordered off HILL "E" if the Test Platoon uses fire and movement to flank HILL "E" either from HILL "D" or from HILL "B".

PROBLEM VI - (Continued)

(5) If the Test Platoon takes HILL "C" and attempts to move against HILL "E" by any method, the INSTRUCTOR will cause four test tanks to be destroyed by use of the spot light. The INSTRUCTOR will cause the enemy tanks on HILL "B" to move off the crest and take positions behind HILL "B" so they can fire with immunity into the flank of any maneuvering Test Platoon element moving toward HILL "E".

(6) Any solution, other than taking HILL "C", will result in a successful mission.

d. Termination of Problem. The problem will be terminated (or temporarily suspended) when any of the following conditions exist:

(1) Problem terminates when:

(a) Test Platoon leader calls team commander (INSTRUCTOR) and reports, in essence, "Mission Accomplished."

(b) Test Platoon has lost four (4) tanks to enemy action.

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty or malfunctioning equipment (NOT the fault of operator).

(b) Test Platoon communications net is inoperative, excluding tank interphone or operator deficiency.

(c) INSTRUCTOR deems it necessary to prevent excessive damage to equipment (miniature tanks or terrain features).

NOTE: None of the above information will be given to the Test Platoon personnel.

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of Map "B".)

a. AN ENEMY FORCE OF BATTALION SIZE IS LOCATED ABOUT 5 MILES NORTH OF HILL "E" (OFF THE TOP OF THE MAP). THIS ENEMY FORCE IS PREPARING TO ATTACK SOUTH. THEIR ATTACK WILL JUMP OFF IN ABOUT 3 HOURS. AN ENEMY SCREENING FORCE, CONSISTING OF TANKS AND AT GUNS, IS PROWLING AROUND TO OUR FRONT.

b. OUR TEAM WILL ATTACK NORTH TO DRIVE THIS ENEMY SCREENING ELEMENT BACK TOWARD THEIR MAIN FORCE, AND TO SEIZE AND OCCUPY TERRAIN WHICH WILL COMMAND THEIR AVENUES OF APPROACH. OUR TEAM WILL ATTACK IN 15 MINUTES, WITH THREE PLATOONS ABREAST.

1ST PLATOON ON THE LEFT (WEST).

2D PLATOON IN THE CENTER (OFF MAP TO THE RIGHT, EAST).

3D PLATOON ON THE RIGHT (EAST).

PROBLEM VI - (Continued)

FIRST PLATOON, YOUR MISSION IS TO SEIZE AND OCCUPY HILL "E". YOU CAN EXPECT TO FIND ENEMY TANKS ON HILLS "B" AND "C". THE 2D PLATOON WILL BE ON YOUR RIGHT FLANK, BUT YOUR LEFT FLANK WILL BE OPEN.

THE BATTALION MORTAR PLATOON IS IN DIRECT SUPPORT OF THE 3D PLATOON, BUT A MEDIUM ARTILLERY BATTERY IS IN GENERAL SUPPORT OF OUR TEAM.

WE DO NOT HAVE ANY ATTACHMENTS.

c. I WILL BE WITH THE 2D PLATOON INITIALLY.

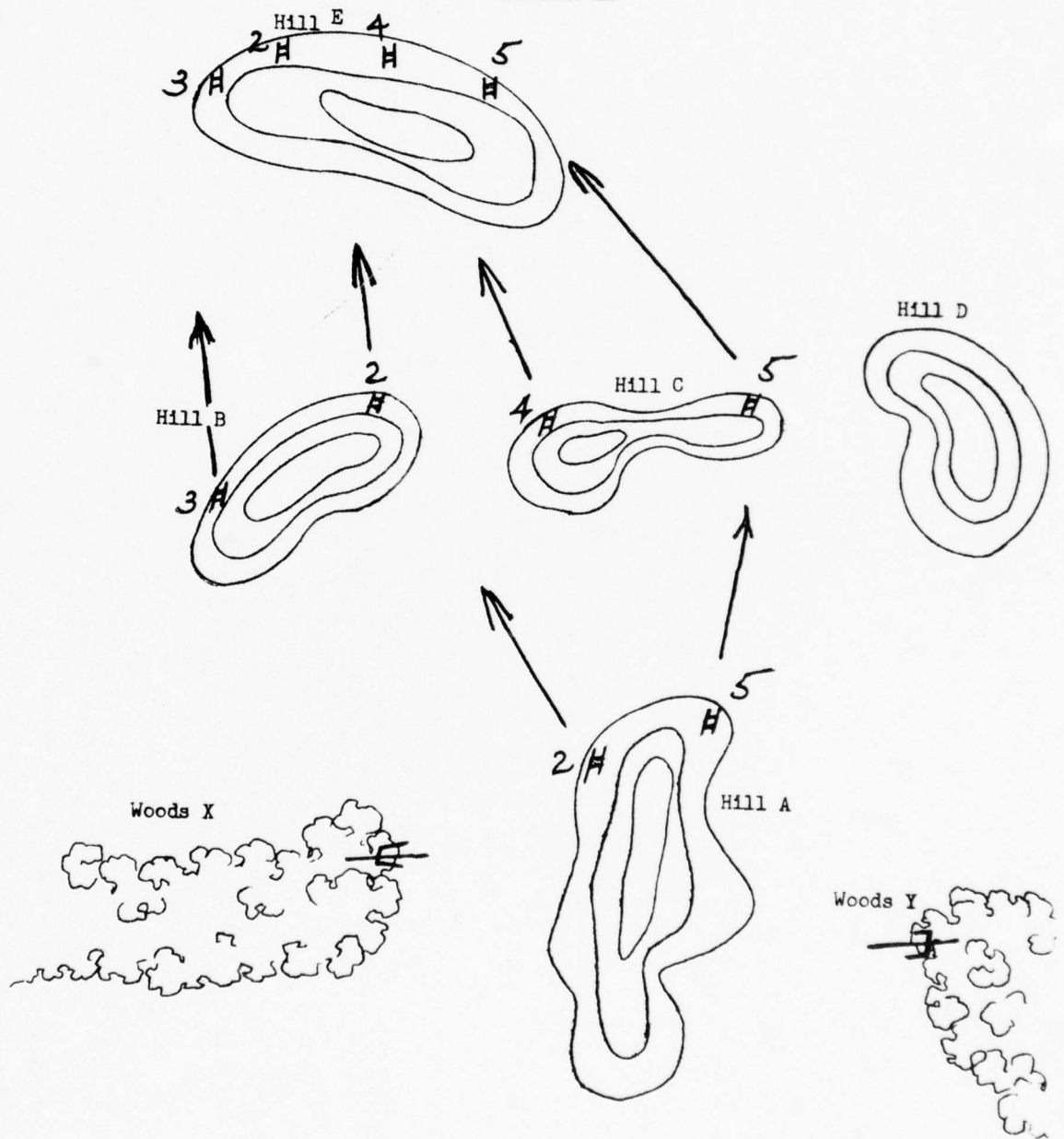
ARE THERE ANY QUESTIONS?

THE TIME IS NOW _____ HOURS.

REPORT WHEN YOU ARE READY TO MOVE.

MAP A

Problem VI



H 1
H 2
H 3
H 4
H 5

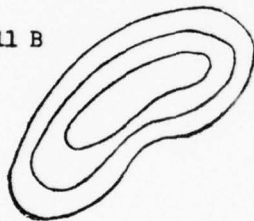
MAP B

Problem VI

Hill E



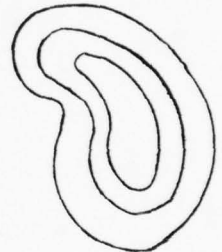
Hill B



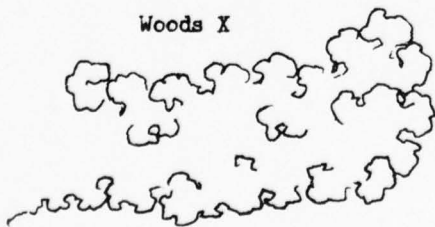
Hill C



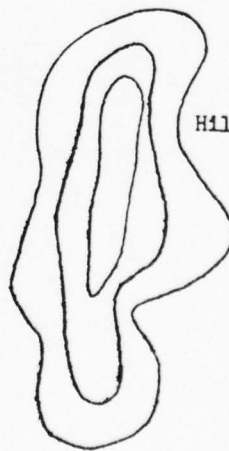
Hill D



Woods X



Hill A



Woods Y



H 1
H 2
H 3
H 4
H 5

PROBLEM VI - (Continued)

4. SOLUTION AND SCORING

	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon attack order, and mentions	1	_____
(a) Enemy force	1	_____
Strength (Battalion size)	1	_____
Location (north off map)	1	_____
Purpose (to attack south)	1	_____
Screening force (expect enemy tanks on HILLS "B" and "C")	1	_____
(b) Friendly force	1	_____
Team mission (drive back enemy screening force)	1	_____
Platoon mission (seize and occupy HILL "E")	1	_____
2d Platoon (in center)	1	_____
3d Platoon (on right)	1	_____
Fire support available (artillery battery in general support)	1	_____
Attachments (NONE)	1	_____
Scheme of movement (plan of attack)	1	_____
Report when ready	1	_____
(6) Deploys from column into wedge or line formation	1	_____
(7) Reconnoitered WOODS "A" by fire	1	_____
(8) Reconnoitered WOODS "B" by fire	1	_____

PROBLEM VI - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(9) Sets up base of fire on HILL "A"	2	_____
(a) Designates manner of movement	1	_____
(b) Designates tanks to act as base of fire	1	_____
(10) Requests smoke on HILLS "B" and "C"	1	_____
(11) Requests smoke on HILLS "C" and "D"	1	_____
(12) Requests supporting fires on HILLS "B" and "C"	$\frac{1}{2}$	_____
(13) Requests supporting fires on HILLS "C" and "D"	$\frac{1}{2}$	_____
(14) Moves entire platoon to HILL "D"	2	_____
(a) Moves in echelon left or wedge formation	1	_____
(b) Moves with guns traversed to cover exposed flank	1	_____
(15) Moves section to HILL "D"	3	_____
(a) Moves in echelon left or wedge formation	1	_____
(b) Moves with guns traversed to cover exposed flank	1	_____
(c) Designates manner of movement	1	_____
(16) Moves base of fire to HILL "D"	1	_____
(a) Moves with guns traversed to cover exposed flank	1	_____
(b) Designates manner of movement	1	_____
(17) Moves entire platoon to attack HILL B	2	_____
(a) Moves in echelon right or wedge formation	1	_____
(b) Moves with guns traversed to cover exposed flank	1	_____

PROBLEM VI - (Continued) (Solution and Scoring)		<u>Value</u>	<u>Score</u>
(18)	Moves section to HILL "B"	3	_____
	(a) Moves in echelon right or wedge formation	1	_____
	(b) Moves with guns traversed to cover exposed flank	1	_____
	(c) Designates manner of movement	1	_____
(19)	Moves base of fire to HILL "B"	1	_____
	(a) Moves with guns traversed to cover exposed flank	1	_____
	(b) Designates manner of movement	1	_____
(20)	Lifts supporting fire or smoke after reaching either HILL "D" or "B"	1	_____
(21)	Requests supporting fire on HILL "E"	1	_____
(22)	Moves section to HILL "E" from HILL "D"	3	_____
	(a) Moves in echelon left or line formation	1	_____
	(b) Designates manner of movement	1	_____
	(c) Moves around right flank of HILL "D"	1	_____
	(d) Designates tanks to act as base of fire	1	_____
(23)	Moves section from HILL "B" to HILL "E"	2	_____
	(a) Moves in echelon right or line formation	1	_____
	(b) Moves around left flank of HILL "B"	1	_____
	(c) Designates manner of movement	1	_____
	(d) Designates tanks to act as base of fire	1	_____
(24)	Moves base of fire from HILL "D" to HILL "E"	1	_____
	(a) Moves around flank of HILL "D"	1	_____
	(b) Designates manner of movement	1	_____

PROBLEM VI - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(25) Moves base of fire from HILL "B" to HILL "E"	1	_____
(a) Moves around flank of HILL "B"	1	_____
(b) Designates manner of movement	1	_____
(26) Moves entire platoon from either HILL "B" or HILL "D"	1	_____
(a) Moves around flank(s) of either HILL "B" or "D"	1	_____
(b) Designates type of formation	1	_____
(27) Lifts fire on HILL "E"	1	_____
(28) Reports MISSION ACCOMPLISHED	1	_____
(29) NO enemy antitank weapon ordered to fire by INSTRUCTOR	2	_____
(30) ONE enemy antitank weapon was ordered to fire by INSTRUCTOR	$\frac{1}{2}$	_____
(31) Any action taken by the platoon leader other than designated in the Score Sheet is worth ONE point for the entire action taken.	1	_____
(32) Completes problem with NO tank losses	15	_____
(33) Completes problem with ONE tank loss	10	_____
(34) Completes problem with TWO tank losses	5	_____
(35) Completes problem with THREE tank losses	2	_____
(36) Completes problem with FOUR tank losses	1	_____

POSSIBLE SCORE 67

SCORE MADE _____

(37) Deduct five (5) points from SCORE MADE if incorrect radio procedure was habitually used.	5	_____
---	---	-------

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) Paragraph 273, (attack order) and 281.

FM-17-33 Paragraphs 5a, 6, 22, 26b, 37, 38, 39, 40, 41, 44b, 49, 51, 58, 60, 83, 91, 92, 94, 95, 96b, 99, 100.

PROBLEM VII - Attack Through Semi-Open Terrain; Road Block; Minefield;
Reconnaissance by Fire; Employment of Base of Fire; Use
of Smoke

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on Map "A". The first and second curtains will be closed, restricting the view of the board. The area on both sides of the road block will be mined. HILL "D" will be inaccessible to tanks.

b. The Enemy. The enemy will consist of five (5) tanks and two (2) antitank guns located initially as shown on Map "A". Enemy tanks will be controlled by the INSTRUCTOR through ASSISTANT INSTRUCTORS who will operate them. ASSISTANT INSTRUCTORS will also use "cracker-ball" ammunition to simulate enemy fire. Enemy action will depend upon the action taken by the Test Platoon leader (See paragraph 2).

c. Test Platoon. The Test Platoon will be located and sited as shown on Maps "A" and "B", with platoon organized as indicated. The problem will be "free play" as far as the Test Platoon is concerned. ASSISTANT INSTRUCTORS will provide "cracker-ball" ammo to simulate friendly artillery, if platoon leader requests artillery. Test Platoon leader will be permitted one smoke mission. If he calls for SMOKE on any terrain feature other than HILL "F", he will be denied the screen, and if subsequently he asks for smoke on HILL "F", the request will be denied. All Test Platoon tanks destroyed by enemy action will remain out of action for duration of the problem. In event the platoon leader is a casualty, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon leader and platoon sergeant become casualties, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but retaining communications over the platoon net with the remaining tanks.

NOTE: The INSTRUCTOR (team commander) will not respond to any calls made from any tank other than the platoon leader's or platoon sergeant's tank.

d. The Instructor. The INSTRUCTOR will be responsible for being completely familiar with the contents of this entire document. He will act as the Test Platoon team commander, and as controller of the enemy. The INSTRUCTOR will control all enemy fire and movement, including the use of "cracker-ball" ammo and ASSISTANT INSTRUCTORS' use of spot lights to knock out test tanks, if required. The CHIEF ASSISTANT INSTRUCTOR will plot all Test Platoon and enemy moves on a copy of Map "A". In the event the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint another platoon leader, reactivate the destroyed tanks, and run the problem again WITHOUT benefit of a critique. ONLY completed problems will be critiqued.

PROBLEM VII - (Continued)

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the platoon is to seize, occupy, and hold HILL "G".

b. Starting of the Problem. The problem will begin when the INSTRUCTOR and the selected platoon leader confer on the floor in front of the control platform. All other platoon personnel will be assembled behind the platform, where they cannot overhear the INSTRUCTOR and platoon leader. The INSTRUCTOR will issue the oral Operation Order to the platoon leader and give him five (5) copies of Map "B". In the meantime, the CHIEF ASSISTANT INSTRUCTOR will assign three (3) men to each tank, designating who will be the Driver, Gunner, and Tank Commander, respectively. The tank commander of Tank Nr 4 will be platoon sergeant. The platoon leader will be given 20 minutes to make his visual and map reconnaissance, brief the platoon, and issue his initial order to his tank commanders. The INSTRUCTOR will alert the ASSISTANT INSTRUCTORS. When the platoon leader notifies the INSTRUCTOR that the platoon is ready to begin, the INSTRUCTOR will order the platoon leader to "MOVE OUT".

c. Phase Nr 1. As the Test Platoon begins to move out (regardless of formation) and places tanks on HILL "A", or on the flanks of HILL "A", the INSTRUCTOR will open Curtain Nr 1, exposing the terrain to Curtain Nr 2, which is closed.

d. Phase Nr 2.

(1) If the platoon (or any tank therein) is ordered to fire on WOODS "C", the INSTRUCTOR will assess the enemy AT gun located therein a casualty. The same procedure for the enemy AT gun in WOODS "E".

(2) If one or neither of the WOODS is reconned by fire, the AT guns remain active. If the platoon, or any tank thereof, attempts to bypass the roadblock between WOODS "C" and "E", the INSTRUCTOR will fire a mine and order an ASSISTANT INSTRUCTOR to destroy the tank(s) with a light beam.

(3) If the platoon, or any tank thereof, attempts to maneuver to the WEST (left) edge of WOODS "C" and one or both of the enemy AT guns remain active (See (1) and (2) above) the INSTRUCTOR will cause the active AT guns to fire (accompanied by "cracker-ball" ammo). A hit on a test tank, in this instance, will come as a result of the AT gun fire. Casualties will NOT be assessed by an ASSISTANT INSTRUCTOR'S light beam.

(4) If the platoon, or tanks thereof, maneuver to the EAST (right) around WOODS "E", the enemy AT guns will be assessed as "by-passed", and become ineffective.

e. Phase Nr 3. (Assuming at least two (2) tanks reach HILL "B".)

(1) As the first tank begins to climb HILL "B", the INSTRUCTOR will open Curtain Nr 2, exposing the remainder of the terrain board.

PROBLEM VII - (Continued)

(2) If the platoon, or any tank therein, reconns WOODS "F" by fire, enemy tank Nr 1 will be ordered (by INSTRUCTOR) to move to his assigned position on HILL "G".

(a) If WOODS "F" is not reconned by fire, enemy tank Nr 1 remains in position and if any Test Platoon tanks move north on WILSON ROAD, enemy tank Nr 1 will fire, on order of the INSTRUCTOR, as will tank Nr 2 and Nr 5 (on HILL "F") and Nr 3 (HILL "G").

(b) The INSTRUCTOR will cause all test tanks on WILSON ROAD north of HILL "D" to be destroyed by use of the spot light.

(3) If the Test Platoon leaves a base of fire on HILL "B", and sends a maneuver element to the left (west) of HILL "E", enemy tanks Nr 1 and 2 will be ordered to their positions on HILLS "G" and "F", respectively. The same procedure holds true if the Test Platoon maneuvers the entire platoon to left (west) of HILL "E".

NOTE: The enemy tank on HILL "F" (Nr 5) will be ordered to fire on the maneuvering element.

f. Phase 4.

(1) If the problem gets this far, and the Test Platoon does NOT smoke HILL "F", the INSTRUCTOR will cause the Test Platoon maneuvering element which is moving from HILL "E" to HILL "G" to be destroyed.

(2) If smoke is used on HILL "F", the enemy tanks on HILL "E" will be ordered to withdraw; and if the Test Platoon immediately attacks HILL "G", while the smoke masks HILL "F", the INSTRUCTOR will order enemy tanks on HILL "G" to withdraw.

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of Map "B")

a. AN ENEMY FORCE OF UNDETERMINED STRENGTH, BUT EQUIPPED WITH TANKS AND AT GUNS, HAS BEEN DELAYING OUR MOVEMENT TO THE NORTH. THERE IS A FEELING AT HIGHER HEADQUARTERS THAT THE ENEMY IS WITHDRAWING TO DRAW OUR FORCES INTO A KILLING TRAP--CONSEQUENTLY WE HAVE BEEN ATTACKING WITH CAUTION.

b. OUR TEAM, WHICH IS A PART OF TASK FORCE FIELD, HAS BEEN SPEARHEADING THE ATTACK. WE HAVE NOW REACHED THE CRITICAL PHASE OF OUR ATTACK. OUR TEAM MUST SEIZE AND HOLD TWO TERRAIN FEATURES WHICH WILL PERMIT THE TF TO LAUNCH AN ALL OUT OFFENSE. WE MUST TAKE HILL "G" AND HILL 333 (OFF THE MAP TO THE RIGHT (EAST)).

1ST PLATOON, YOUR MISSION IS TO SEIZE AND HOLD HILL "G".
2D PLATOON -- HILL "333".
3D PLATOON TO FOLLOW 2D PLATOON.

PROBLEM VII - (Continued)

FIRST PLATOON, YOU WILL BE PREPARED TO ATTACK IN 15 MINUTES. THE BATTALION MORTAR PLATOON WILL BE IN GENERAL SUPPORT; HOWEVER, YOU HAVE AT YOUR DISPOSAL ONE SMOKE MISSION. I CAUTION YOU, YOU HAVE ONLY ONE SMOKE MISSION AVAILABLE. USE IT TO YOUR BEST ADVANTAGE.

YOU WILL NOT HAVE ANY ATTACHMENTS.

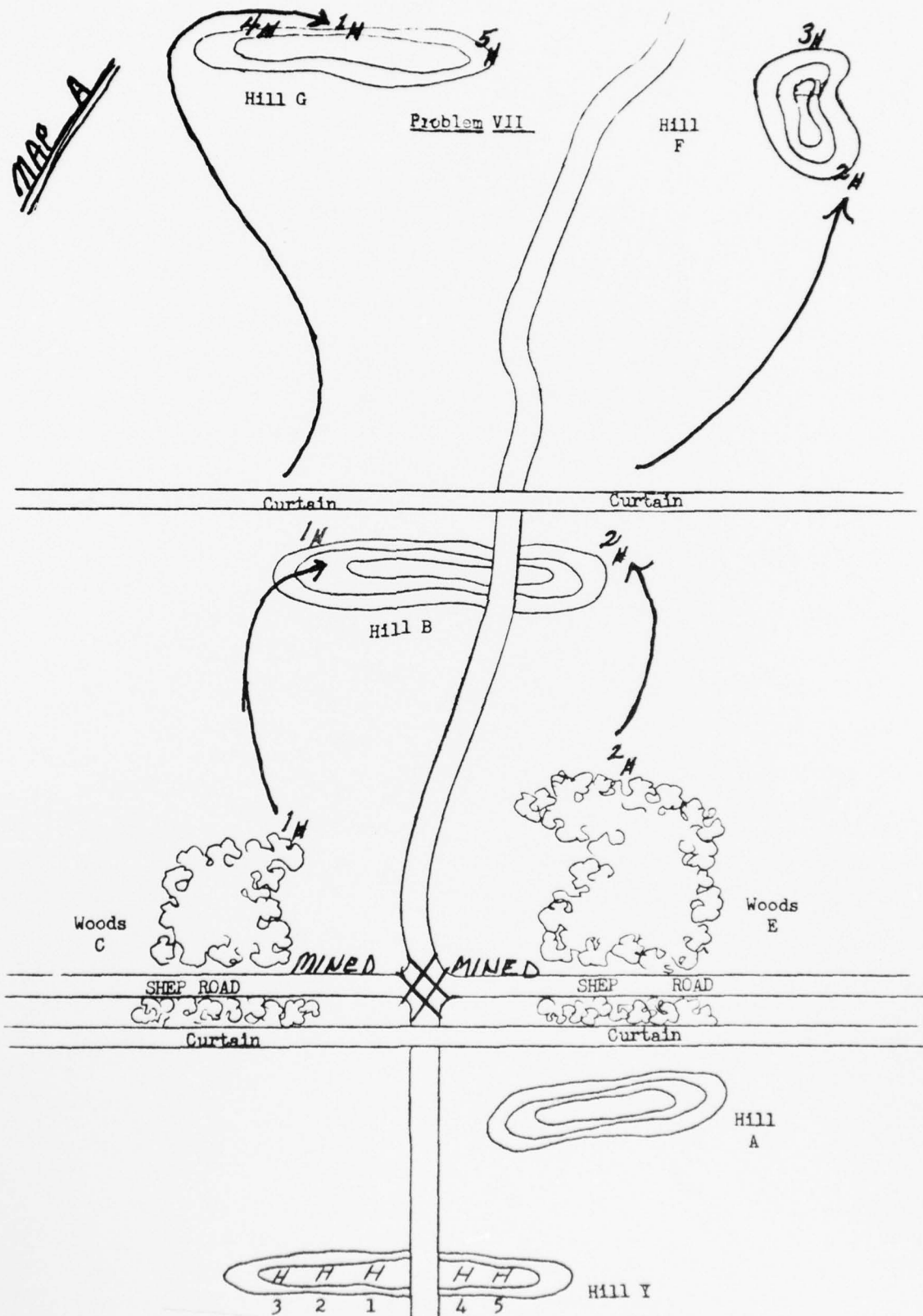
I WILL BE WITH THE 3D PLATOON INITIALLY.

DO YOU HAVE ANY QUESTIONS?

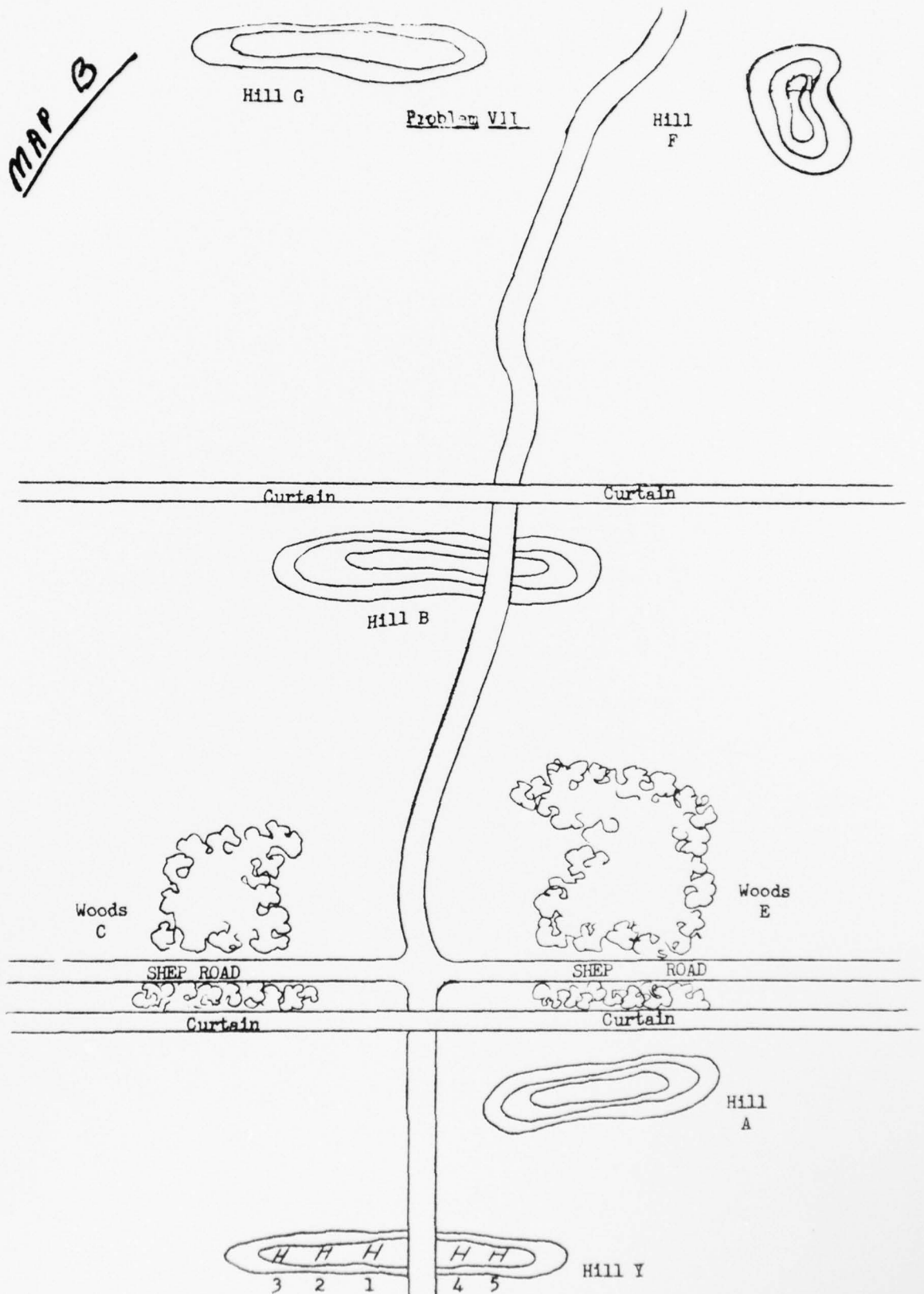
IT IS NOW _____ HOURS.

MAP A

Problem VII



MAP B



PROBLEM VII - (Continued)

4. SOLUTION AND SCORING

	<u>Value</u>	<u>Score</u>
(1) Assembles the tank commanders	1	_____
(2) Makes visual reconnaissance	1	_____
(3) Makes map reconnaissance	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues attack order, and mentions	1	_____
(a) Enemy force	1	_____
Strength (Tanks and AT Guns)	1	_____
Disposition (unknown)	1	_____
Action (delaying)	1	_____
(b) Friendly force	1	_____
Mission (Seize HILL "G")	1	_____
TF to launch all-out offensive	1	_____
Attack in 15 minutes	1	_____
Mortar Platoon general support	1	_____
ONE smoke mission available	1	_____
NO attachments	1	_____
Scheme (plan) for attack	1	_____
Report when ready	1	_____

PART I

(6) Moves entire platoon from HILL "Y" to HILL "A"	$\frac{1}{2}$	_____
(a) Moved around right flank of HILL "Y"	1	_____
(7) Moves section from HILL "Y" to HILL "A"	1	_____
(a) Moves around right flank of HILL "Y"	1	_____

PROBLEM VII - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(b) Designated manner of movement	1	_____
(c) Designated tanks to act as base of fire	1	_____
(8) Moves base of fire from HILL "Y" to HILL "A"	1	_____
(a) Moves around right flank of HILL "Y"	1	_____
(b) Designates manner of movement	1	_____
(9) Reconnoitered by fire WOODS "E" before maneuvering around the right flank of WOODS "E"	2	_____
(10) Reconnoitered by fire WOODS "C"	1	_____
(11) Sent maneuver section around right flank of WOODS "E" to take HILL "B"	3	_____
(a) Moves with guns traversed to cover exposed flank	1	_____
(b) Moves around flank of HILL "A"	1	_____
(c) Moves in echelon left or column formation	1	_____
(d) Designates manner of movement	1	_____
(e) Reconnoitered by fire WOODS "E" while flanking	1	_____
(f) Designated tanks to act as base of fire	1	_____
(12) Moves base of fire to HILL "B"	1	_____
(a) Moves around right flank of HILL "A"	1	_____
(b) Designates manner of movement	1	_____
(13) Any action taken by the platoon leader other than that specified in the Score Sheet is worth ONE point for the entire action taken.	1	_____

PART I POSSIBLE SCORE 40

SCORE MADE ON PART I _____

PROBLEM VII - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
PART II		
(14) Orders tanks on his right to take HILLS "D" and "F" under fire	2	_____
(15) Orders tanks on his left to take HILLS "E" and "G" under fire	2	_____
(16) Designates target(s) for his Gunner	1	_____
(17) Requests supporting fire on HILL "D"	2	_____
(18) Requests smoke on HILL "D"	1	_____
(19) Requests supporting fires on HILL "G"	1	_____
(20) Designates tanks to act as base of fire	1	_____
(a) Has base of fire watch HILLS "D" and "F"	1	_____
(21) Sends section to HILL "G"	3	_____
(a) Moves around flank of HILL "B"	1	_____
(b) Moves around left flank of HILL "E"	1	_____
(c) Moves with guns traversed to cover exposed flank	1	_____
(d) Designates manner of movement	1	_____
(e) Requests smoke on HILL "F" to cover his flank	2	_____
(22) Lifted supporting fire on HILL "G" before moving onto the hill	1	_____
(23) Moves base of fire to HILL "G"	1	_____
(a) Moves around left flank of HILL "B"	1	_____
(b) Moves around left flank of HILL "E"	1	_____
(c) Designates manner of movement	1	_____
(24) Moves entire platoon to HILL "G"	1	_____
(a) Moves around flank of HILL "B"	1	_____

PROBLEM VII - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(b) Moves around left flank of HILL "E"	1	_____
(c) Designates manner of movement	1	_____
(25) Reports to team commander MISSION ACCOMPLISHED	1	_____
(26) NO enemy gun ordered to fire by the INSTRUCTOR	5	_____
(27) ONE enemy gun ordered to fire by the INSTRUCTOR	3	_____

PART II POSSIBLE SCORE 30

SCORE MADE ON PART II _____

(28) Completes the problem with NO tank losses	15	_____
(29) Completes the problem with ONE tank loss	10	_____
(30) Completes the problem with TWO tank losses	5	_____
(31) Completes the problem with THREE tank losses	2	_____
(32) Completes the problem with FOUR tank losses	1	_____

POSSIBLE SCORE FOR ENTIRE PROBLEM 85

SCORE MADE FOR ENTIRE PROBLEM _____

(33) Deduct five (5) points from SCORE MADE FOR ENTIRE PROBLEM if incorrect radio procedure was <u>habitually</u> used.	5	_____
---	---	-------

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) paragraph 273,
(attack order) and 281.

FM-17-33 Paragraphs 5a, 6, 22, 26b, 37, 38, 39, 40, 41, 44b, 49, 51, 56, 60,
83, 91, 92, 94, 96b, 99, 100, 108.

PROBLEM VIII - Flank Guard in the Advance; Block Avenues of Approach; Observe from Commanding Terrain; and Reconnaissance by Fire

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on attached Map "A". The curtain will be open, so that the entire terrain complex will be exposed to view.

b. Enemy. Five enemy tanks will be used in this problem; they will be located and sited as shown on Map "A". The INSTRUCTOR will control the activity of these concealed enemy tanks, and will at the same time order the ASSISTANT INSTRUCTORS to fire "cracker-ball" ammo to alert the platoon to the fact that the platoon is under fire. Enemy casualties will be assessed by the INSTRUCTOR in response to correct Test Platoon action.

c. Test Platoon. The Test Platoon initially will be located as shown on Map "B". The Test Platoon leader will be given the oral Operation Order and five (5) copies of Map "B", by the INSTRUCTOR. The Test Platoon leader will then be permitted 15 minutes in which to complete his visual and map reconnaissance, brief his tank commanders, and issue his orders. The problem will be "free play" as far as the Test Platoon is concerned. Test Platoon casualties will NOT be assessed, but will occur normally if the platoon employs faulty techniques, or tactics. All Test Platoon tanks knocked out by enemy action will remain out of action for duration of the problem. If the platoon leader's tank is knocked out, the platoon sergeant will assume command (on order of the INSTRUCTOR); if the platoon sergeant is knocked out, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR), but with platoon communications to the remaining tanks.

d. The Instructor. The INSTRUCTOR will be completely familiar with this entire document. In addition, the INSTRUCTOR will act as the Test Platoon leader's team commander, and will respond to all calls made by the Test Platoon leader; however, the INSTRUCTOR will refrain from coaching the platoon leader. The INSTRUCTOR will orally issue the Operation Order, and give five (5) copies of Map "B" to the Test Platoon leader. No other instructions regarding the problem will be divulged. When the platoon leader indicates he is ready, the INSTRUCTOR will command, "MOVE OUT". The ASSISTANT INSTRUCTOR will plot all Test Platoon moves on a copy of Map "A". If the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint a new platoon leader and the problem will be run again WITHOUT benefit of a critique. A critique will be conducted ONLY if the problem is completed.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the platoon is to protect the

AD-A072 530

HUMAN RESOURCES RESEARCH ORGANIZATION ALEXANDRIA VA
USER MANUAL FOR THE MINIATURE ARMOR BATTLEFIELD (MAB). REVISION--ETC(U)
MAR 62 R A BAKER, J G COOK

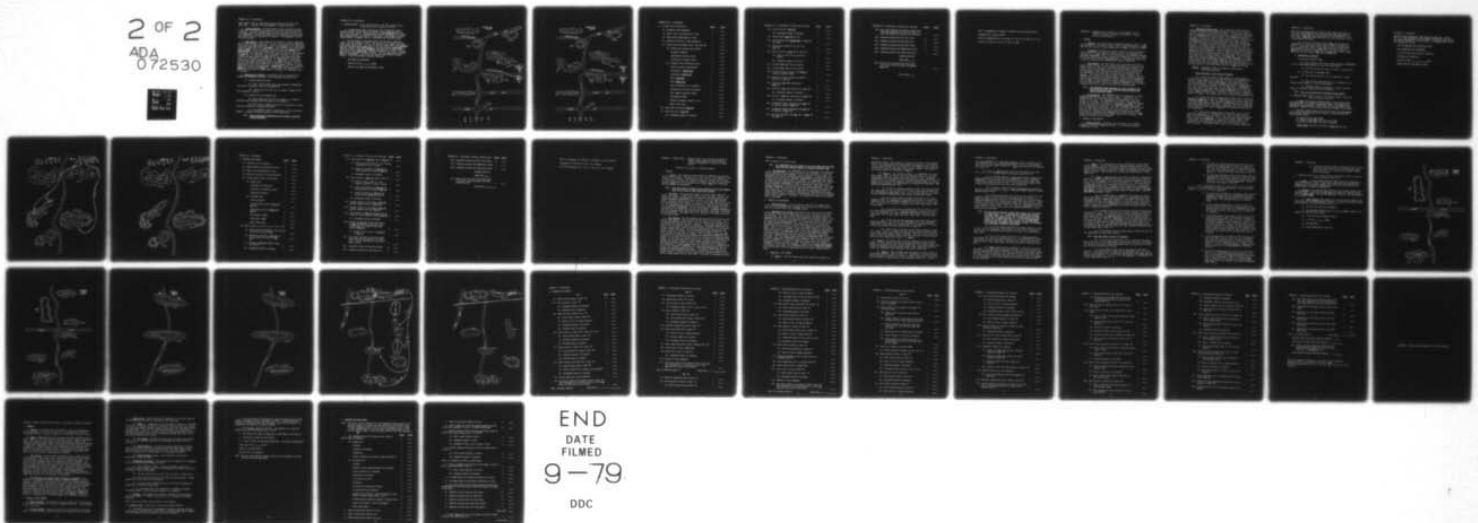
F/G 5/9

DA-44-188-ARO-2

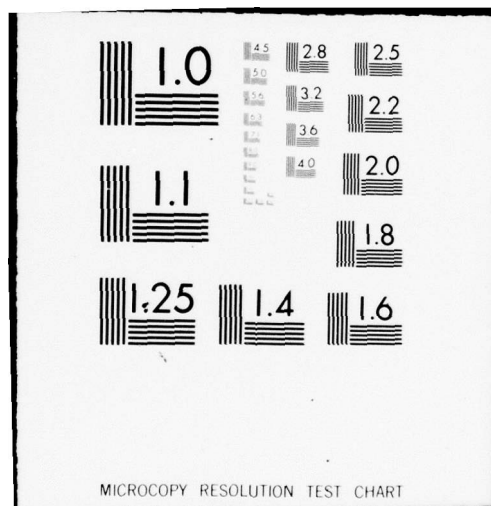
NL

UNCLASSIFIED

2 OF 2
ADA
072530



END
DATE
FILMED
9-79
DDC



PROBLEM VIII - (Continued)

right (east) flank of a Task Force moving north off the map to the left (west). (See Map "A", and paragraph 3, Operation Order.)

b. Platoon Movement. The Test Platoon will be situated as shown on Map "A". The Test Platoon leader will be given the oral order and 15 minutes to make his preparations and issue his initial order to his tank commanders. The platoon leader will be responsible for selecting the platoon formation and method of movement. (See paragraph 4, Solution and Scoring.)

c. Enemy Action. Enemy tanks will be located as shown on Map "A", and will be concealed from view of the Test Platoon until the INSTRUCTOR orders them to expose themselves. As the lead element of the flank guard approaches PHASE LINE BLACK (COOK ROAD), the INSTRUCTOR will order enemy tanks in BARN 1 and 2 to depart their shelter and move slowly toward REYNOLDS ROAD. As the Test Element takes up positions and fires on enemy tanks, the enemy tanks will return the fire, then on order retreat to WOODS "D". No casualties will be assessed. However, if the Test Platoon does not reconnoiter WOODS "B" by fire, the enemy tank hidden there will be ordered to open fire (by the INSTRUCTOR) as the Tested Platoon moves beyond PHASE LINE BLACK. If WOODS "B" is reconnoitered by fire, the enemy tank therein will be assessed a casualty. As the Test Platoon moves toward BAKER ROAD (or lead element thereof) the INSTRUCTOR will order the enemy tanks on BAKER ROAD to move out from behind WOODS "D", slowly toward WOODS "C". As the fire fight develops, the INSTRUCTOR will order the enemy tanks to withdraw. No casualties will be assessed.

d. Termination of Problem. The problem will be terminated (or temporarily suspended) when any of the following conditions exist:

(1) Problem terminates when:

(a) Test Platoon leader calls team commander (INSTRUCTOR) and reports in essence, "Mission Accomplished".

(b) Test Platoon has lost four (4) tanks to enemy action (See paragraph 1c above).

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty or malfunctioning equipment (NOT the fault of the operator).

(b) Test Platoon communications net is inoperative, excluding tank interphone or operator deficiency.

(c) The INSTRUCTOR deems it necessary to prevent excessive damage to equipment (miniature tanks or terrain features).

NOTE: None of the above information will be given to the Test Platoon personnel.

PROBLEM VIII - (Continued)

3. OPERATION ORDER (To be issued orally to the Test Platoon leader, along with five (5) copies of Map "B")

a. AN ENEMY ARMOR FORCE OF BATTALION SIZE IS EMPLOYING STRONG DELAYING TACTICS AS THEY MOVE BACK (NORTH) TOWARD BAKER ROAD OFF THE MAP TO THE LEFT (WEST). REINFORCEMENTS HAVE BEEN REPORTED TO BE MOVING WEST, FROM THE EAST, OFF THE MAP TO YOUR RIGHT. THE STRENGTH OF THESE REINFORCEMENTS IS UNKNOWN, BUT IT IS REPORTED THAT THEY HAVE TANKS.

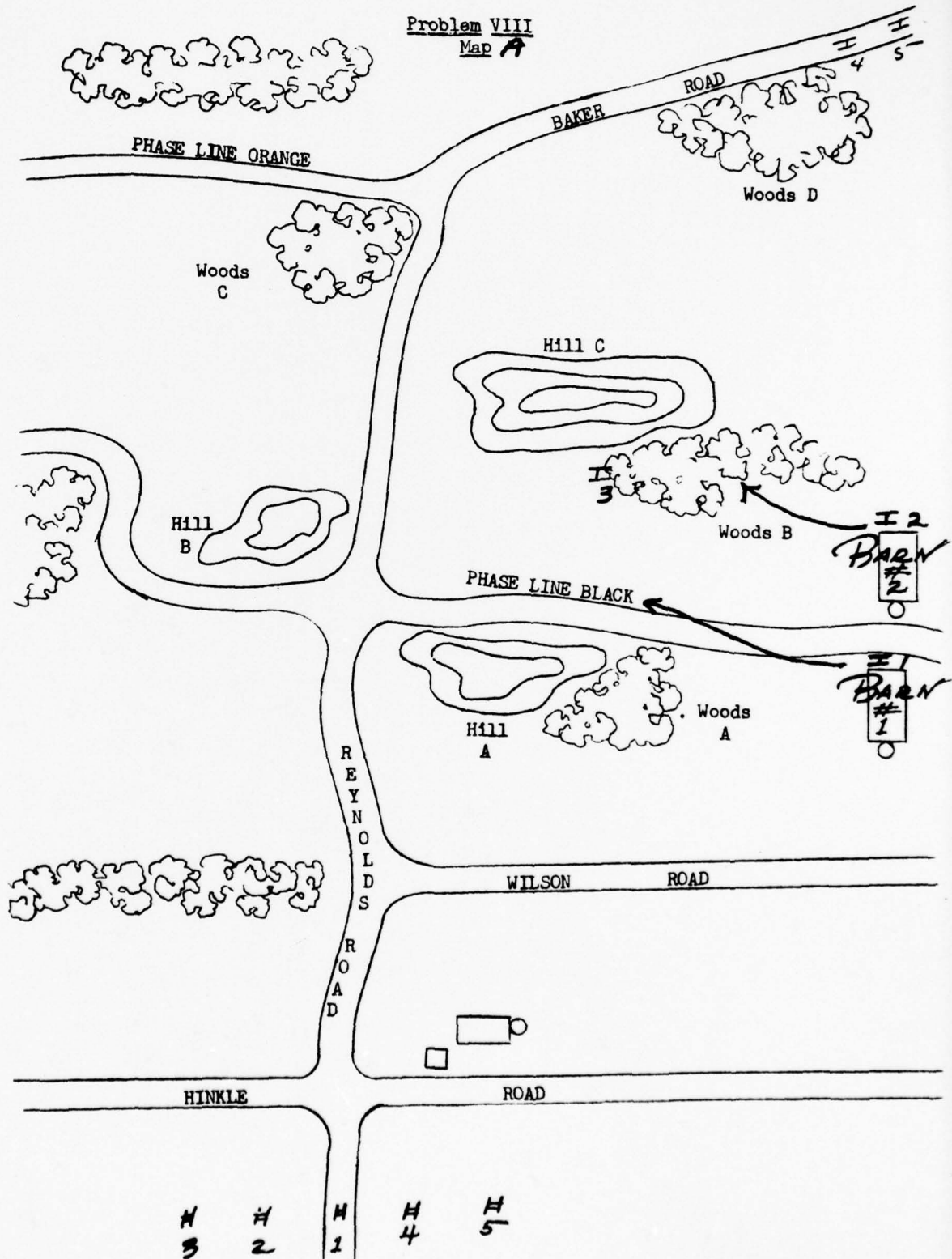
b. OUR TASK FORCE IS ATTACKING NORTH, OFF THE MAP TO YOUR LEFT (WEST), AND THE PROGRESS IS SLOW. YOUR MISSION IS TO PROTECT THE TASK FORCE RIGHT (EAST) FLANK. YOU WILL DO THIS BY MOVING NORTH ALONG REYNOLDS ROAD AND RECONNOTTERING HINKLE ROAD TO THE EAST (RIGHT); WILSON ROAD TO THE EAST (RIGHT); THEN BLOCK COOK ROAD, AND MAINTAIN THE BLOCK UNTIL I ORDER YOU TO BLOCK BAKER ROAD. KEEP ME INFORMED AT ALL TIMES. YOU WILL NOT HAVE ANY ARTILLERY OR MORTAR SUPPORT. YOU WILL NOT HAVE ANY ATTACHMENTS OR DETACHMENTS. THE 2D AND 3D PLATOONS WILL BE WITH THE MAIN COLUMN. I WILL BE WITH THE 2D PLATOON INITIALLY.

ARE THERE ANY QUESTIONS?

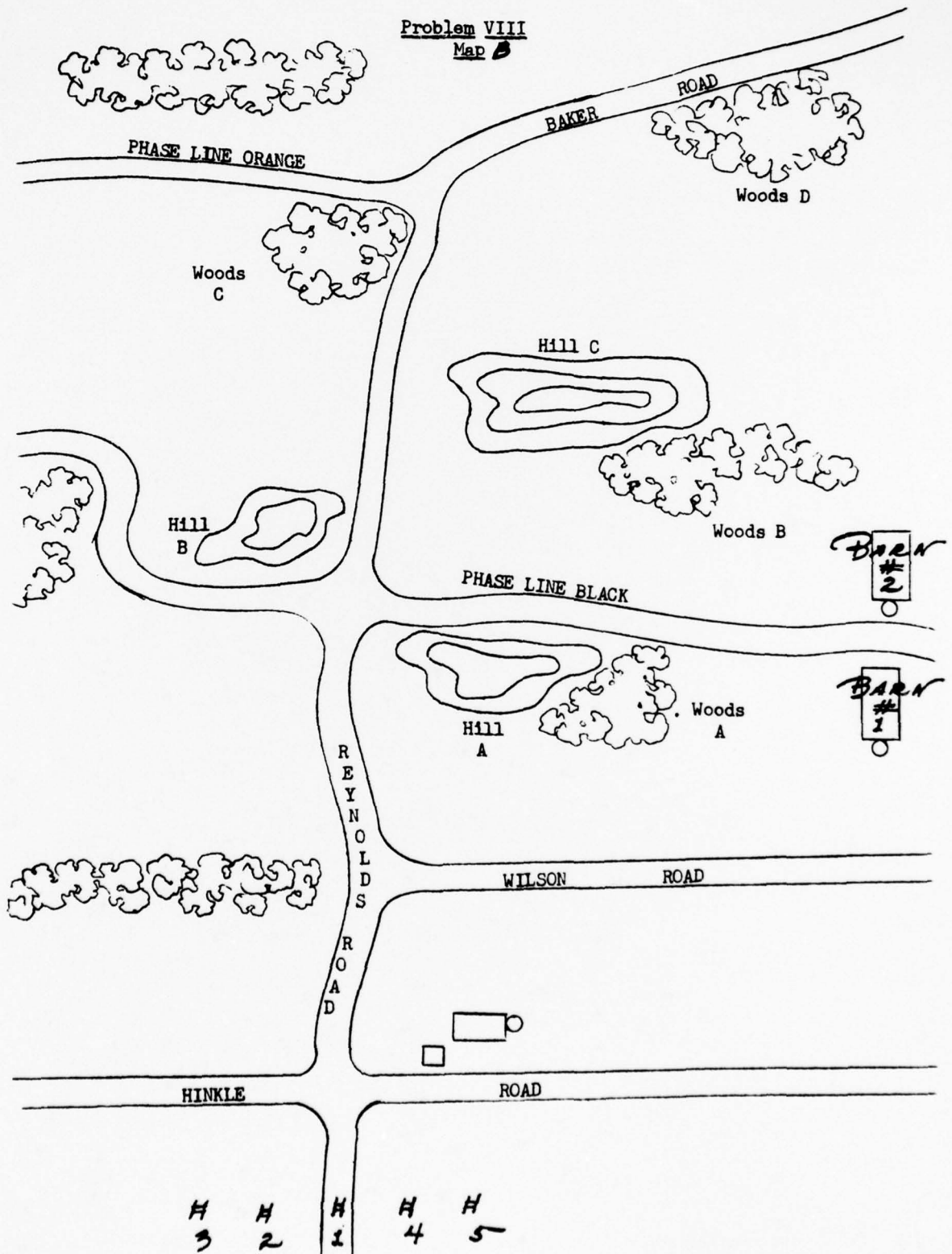
THE TIME IS NOW _____ HOURS.

REPORT TO ME WHEN YOU ARE READY TO MOVE.

Problem VIII
Map A



Problem VIII
Map B



PROBLEM VIII - (Continued)

4. SOLUTION AND SCORING SHEET	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon movement order, and mentions	1	_____
(a) Enemy force (moving back slowly)	1	_____
Strength (unknown)	1	_____
Approximate location (east)	1	_____
Direction of movement (west)	1	_____
(b) Friendly force (attacking north)	1	_____
Platoon mission (flank guard)	1	_____
Reconnoiter <u>HINKLE ROAD</u>	1	_____
Reconnoiter <u>WILSON ROAD</u>	1	_____
Block <u>COOK ROAD</u>	1	_____
Block <u>BAKER ROAD</u>	1	_____
Time of movement (in 15 minutes)	1	_____
Disposition of 2d and 3d platoons	1	_____
Fire support available (NONE)	1	_____
Attachments (NONE)	1	_____
Scheme of movement (bounds, etc.)	1	_____
Report when ready	1	_____
(6) Some tank reconnoiters <u>BARN "X"</u>	1	_____
(7) Moves section to <u>HILL "A"</u>	1	_____
(a) Designates manner of movement	1	_____

PROBLEM VIII - (Continued) (Solution and Scoring)		<u>Value</u>	<u>Score</u>
(8)	Moves section to <u>HILL "B"</u>	1	_____
	(a) Designates manner of movement	1	_____
(9)	Reconnoiters <u>WOODS "A"</u> by fire	1	_____
(10)	Platoon moves from <u>WILSON ROAD</u> to <u>HILL "A"</u> by bounds	1	_____
(11)	Reconnoiters <u>WOODS "B"</u> by fire from <u>HILL "A"</u>	1	_____
(12)	Moves section to <u>HILL "B"</u> by leap-frog	3	_____
	(a) Moves to <u>HILL "B"</u> by successive bounds	1	_____
	(b) Designates manner of movement	1	_____
(13)	Occupies <u>HILL "B"</u> with one section	1	_____
(14)	Occupies <u>HILL "A"</u> with one section	1	_____
(15)	Designates enemy targets from <u>BARNES #1</u> and #2 to specific tanks	3	_____
(16)	Designates enemy targets from <u>BARNES #1</u> and #2 to a section	1	_____
(17)	Section on <u>HILL "B"</u> reconnoiters <u>WOODS "C"</u>	3	_____
(18)	Section on <u>HILL "A"</u> leap-frogs to <u>HILL "C"</u>	3	_____
	(a) Designates manner of movement	1	_____
(19)	Section on <u>HILL "B"</u> leap-frogs to <u>WOODS "C"</u>	3	_____
	(a) Designates manner of movement	1	_____
(20)	Designates targets emerging from <u>WOODS "D"</u> to specific tanks on <u>HILL "C"</u>	3	_____
(21)	Designates targets emerging from <u>WOODS "D"</u> to section on <u>HILL "C"</u>	1	_____
(22)	Any other solution from <u>HILL "A"</u> to <u>WOODS "C"</u> and <u>HILL "C"</u>	3	_____

PROBLEM VIII - (Continued) (Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(23) Any action taken by the platoon leader other than that designated on the Score Sheet is worth ONE point for the entire action taken.	1	_____
(24) Completes problem with NO tank losses	15	_____
(25) Completes problem with ONE tank loss	10	_____
(26) Completes problem with TWO tank losses	5	_____
(27) Completes problem with THREE tank losses	2	_____
(28) Completes problem with FOUR tank losses	1	_____

POSSIBLE SCORE 67

SCORE MADE _____

(29) Deduct five (5) points from SCORE MADE if incorrect radio procedure was <u>habitually</u> used.	5	_____
--	---	-------

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93 (estimate of the situation) and
paragraph 273, (attack order)

FM-17-33 Paragraphs 5a, 6, 22, 26b, 37, 38, 39, 40, 44b, 49, 51, 56,
60, 62, 63, 67c, 70, 74, 83, 91, 92, 94, 96b.

PROBLEM IX - Delaying Action; Selection of Intermediate Position;
Method of Movement; Designation of Targets; Action
on Final Delay Position

1. GENERAL

a. Terrain. The terrain will be emplaced as shown on Map "A". The last curtain will be closed to deny a view of enemy dispositions. WOODS "B" must have a lane to permit unrestricted movement of tanks in column.

b. The Enemy. The enemy will consist of five (5) tanks located behind a low hill at the extreme northwest corner of the terrain board (See Map "A"). Enemy tanks will be controlled by the INSTRUCTOR through ASSISTANT INSTRUCTORS. Enemy movement will depend upon the action taken by the Test Platoon leader (See paragraph 2). "Cracker-ball" ammo will be used as directed by the INSTRUCTOR to indicate enemy fire.

c. Test Platoon. The Test Platoon will be located and sited as shown on Maps "A" and "B", with platoon organization as indicated. The platoon will move, and delay, as directed by the platoon leader. The problem will be "free play" as far as the Test Platoon is concerned. All Test Platoon tanks destroyed by enemy action, or knocked out by the INSTRUCTOR, will remain out of action for the duration of the problem. In the event the platoon leader becomes a casualty, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon leader and platoon sergeant become casualties, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR) but retaining communications over the platoon net with the remaining tanks.

NOTE: The INSTRUCTOR (team commander) will not respond to any calls from any tank other than the platoon leader's and platoon sergeant's tanks.

d. The Instructor. The INSTRUCTOR will be responsible for being completely familiar with this entire document. In addition, the INSTRUCTOR will act as the Test Platoon team commander, and as controller of the enemy. The INSTRUCTOR will control all firing and movement of the enemy, as indicated in paragraph 2, CONCEPT OF PROBLEM. He will also direct the activities of ASSISTANT INSTRUCTORS in the use of "cracker-ball" ammunition. The CHIEF ASSISTANT INSTRUCTOR will plot all Test Platoon and enemy moves on a copy of Map "A". In the event the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint another platoon leader and run the problem again WITHOUT benefit of a critique. ONLY completed problems will be critiqued.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. The mission of the platoon is to conduct a delaying action from HILLS "D" and "E" to a final delay position on HILLS "A" and "B".

PROBLEM IX - (Continued)

b. Starting of the Problem. The problem will start with the INSTRUCTOR appointing and conferring with the Test Platoon leader on the floor in front of the control platform. All other test personnel will be assembled behind the control platform, where they cannot overhear the INSTRUCTOR and platoon leader. The INSTRUCTOR will brief the platoon leader and issue the oral Operation Order; in addition, the INSTRUCTOR will give the platoon leader five (5) copies of Map "B". The INSTRUCTOR will then assign three men to each tank, designating who will be commander, driver, and gunner, and who shall be platoon sergeant. The platoon leader will be given 15 minutes to make his visual and map reconnaissance, brief the platoon, and issue his initial order to his tank commanders. When the platoon leader notifies the INSTRUCTOR that the platoon is ready to begin the problem, the INSTRUCTOR will open the curtain exposing the enemy situation, and ordering five enemy tanks to begin movement toward HILL "E". Two other enemy tanks will be opposite HILL "D" but will remain stationary. As enemy action and pressure begin against HILL "E", the INSTRUCTOR will cause "cracker-ball" ammo to be fired at HILL "E" and will then call the platoon leader (as team commander) and order the platoon leader to move his platoon back to the final delay position on HILLS "A" and "B".

MESSAGE SPEARHEAD 11 THIS IS BALONEY 46, BEGIN MOVE TO FINAL DELAY POSITION.

c. Enemy Reactions to Test Platoon Movements.

(1) If the Test Platoon leader orders his entire platoon to begin the movement to the rear simultaneously, the INSTRUCTOR will order the enemy tanks opposite HILL "E" to close immediately with the Test Platoon and pursue them to HILLS "A" and "B", denying the Test Platoon freedom of movement and the opportunity to systematically set up its final delay positions. At the same time, the INSTRUCTOR will order the two (2) enemy tanks opposite HILL "D" to move with all speed directly to HILL "A". Test Platoon casualties will be assessed by the INSTRUCTOR'S spot light. This type of Test Platoon movement is doomed to failure. The problem will not be completed (See paragraph 1d).

(2) If the Test Platoon leader orders Tanks 4 and 5 to proceed directly to HILLS "A" or "B", the INSTRUCTOR will wait until Tanks 4 and 5 are behind HILL "C", or are screened by WOODS "B", and then order the five enemy tanks opposite HILL "E" to attack the east flank of HILL "E", thereby destroying Tanks 1, 2, and 3 on HILL "E", and then continue the attack around the east flank of WOODS "B". The platoon's mission would not be fulfilled.

(3) If the Test Platoon leader orders Tanks 4 and 5 to take positions on HILL "C", the INSTRUCTOR will order the enemy tanks to halt and deploy, then set up a base of fire with two tanks and maneuver three to the east of HILL "E". If the platoon leader assigns targets to his tanks, the INSTRUCTOR will cause two (2) enemy tanks to be knocked out in the maneuvering element (Test Platoon action may do this naturally). When Tanks 4 and 5 report to the platoon leader that

PROBLEM IX - (Continued)

they are in position, and the platoon leader orders his section to move back, the INSTRUCTOR will cause the remaining enemy tanks to move east of HILL "E"; these enemy tanks will be destroyed, if the test tanks on HILL "E" take them under fire, permitting Test Platoon accomplishment of mission.

(4) If the Test Platoon occupies HILLS "A" and "B", the INSTRUCTOR will order three enemy tanks to flank as indicated on Map "A". Additional credit will be given the Test Platoon leader if he maneuvers the section on HILL "B" through the opening in WOODS "B" and attacks the enemy from the rear, while tanks on HILL "A" cover the east flank of HILL "B" and WOODS "B".

d. Termination of Problem.

(1) Problem terminates when:

(a) Test Platoon Leader informs team commander (INSTRUCTOR), "I AM ON FINAL DELAY POSITION", or words to that effect.

(b) Test Platoon has lost four (4) tanks to enemy action.

(2) Problem will be suspended when:

(a) Test Platoon has lost two (2) tanks due to faulty equipment.

(b) Test Platoon communications net is inoperative, excluding tank interphone or operator deficiency.

(c) INSTRUCTOR deems it necessary to prevent excessive damage to equipment (tanks and terrain features).

NOTE: None of the above will be divulged to the platoon.

3, OPERATION ORDER (Issued Orally to Test Platoon leader, along with five (5) copies of Map "B")

a. AN ENEMY ARMOR FORCE OF APPROXIMATELY 3 BATTALIONS HAS BEEN ATTACKING SOUTH ON A COMPARATIVELY NARROW FRONT. THE PRESSURE HAS BEEN STEADY AND UNRELENTING. INDICATIONS ARE THAT THE ENEMY IS NOW PREPARED TO LAUNCH AN ALL-OUT ATTACK WHICH MAY COMMENCE AT ANY MOMENT.

b. OUR TEAM, WHICH IS PART OF TASK FORCE FIELD, HAS BEEN ENGAGED IN A DELAYING ACTION FOR THE PAST TWO DAYS. WE ARE DEPLOYED WITH THREE PLATOONS ABREAST.

1ST PLATOON ON THE LEFT (WEST)
1D PLATOON IN THE CENTER (OFF MAP TO THE EAST)
3D PLATOON ON THE RIGHT (OFF MAP TO THE EAST)

FIRST PLATOON, YOU ARE IN POSITION ON HILLS "D" AND "E";

PROBLEM IX - (Continued)

SECOND SECTION ON HILL "D", FIRST SECTION ON HILL "E". LOOK AT MAP "B". DELAY THE ENEMY IN YOUR PRESENT POSITIONS AS LONG AS YOU CAN WITHOUT BECOMING TOO FIRMLY ENGAGED. YOUR FINAL DELAY POSITION IS ON HILLS "A" AND "B".

YOU WILL NOT HAVE ANY SUPPORTING FIRES.

YOU DO NOT HAVE ANY ATTACHMENTS.

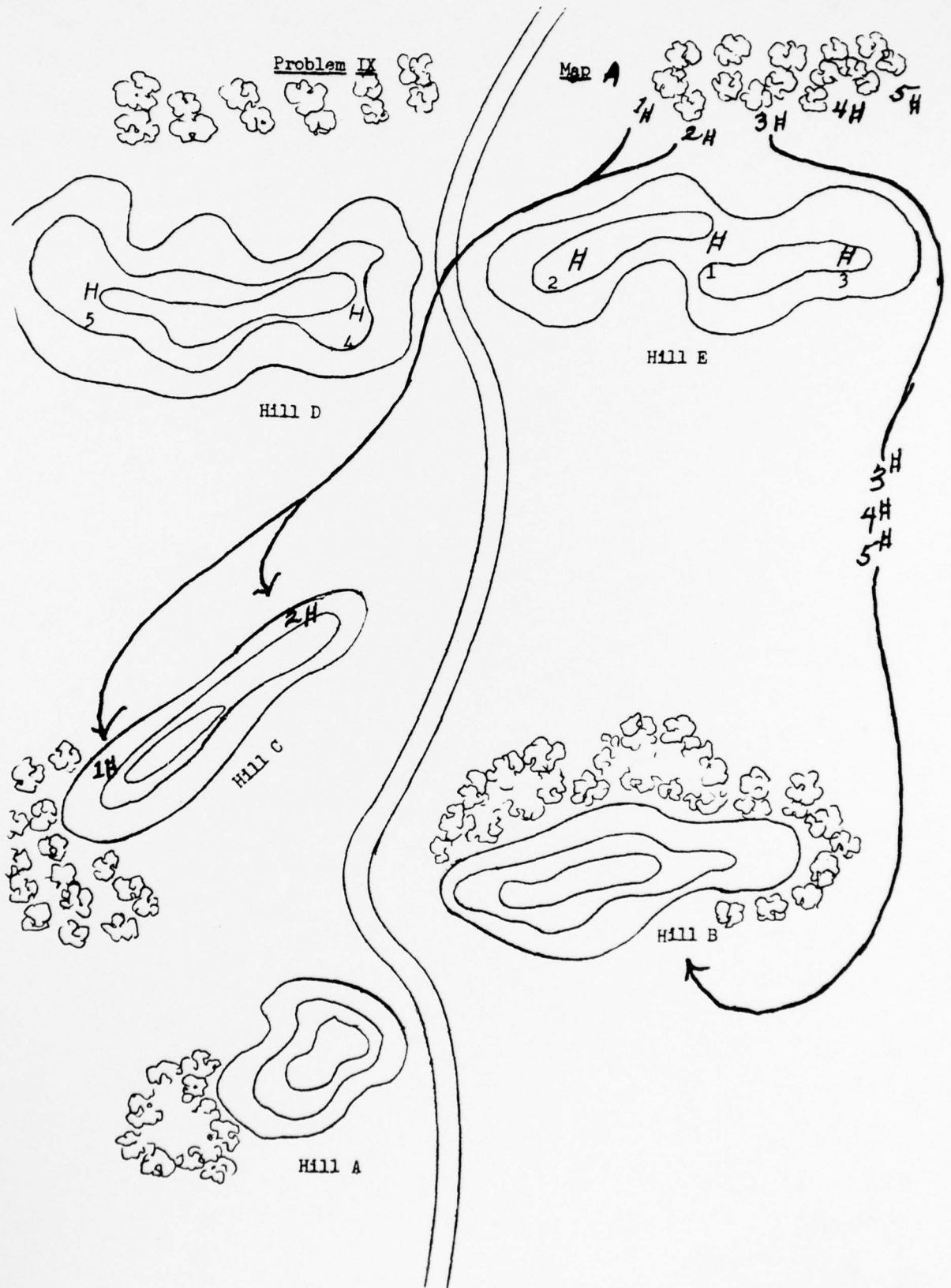
I WILL BE WITH THE 2D PLATOON, INITIALLY.

ARE THERE ANY QUESTIONS?

THE TIME IS NOW _____ HOURS.

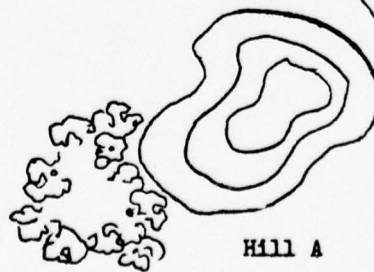
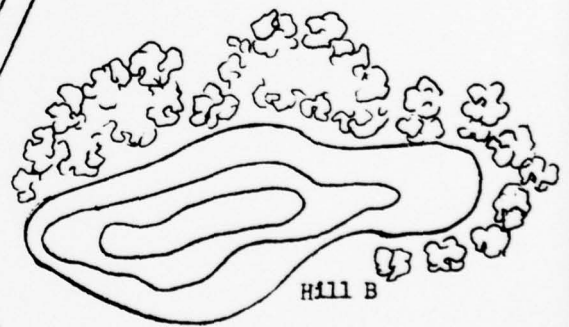
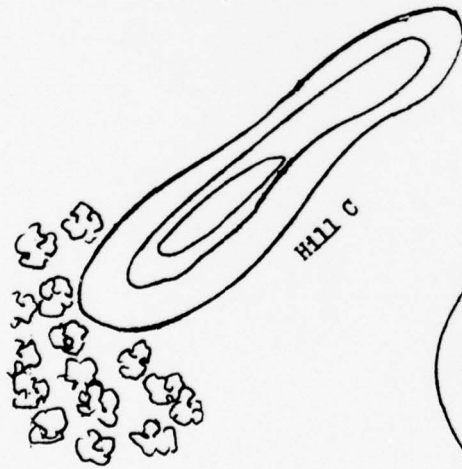
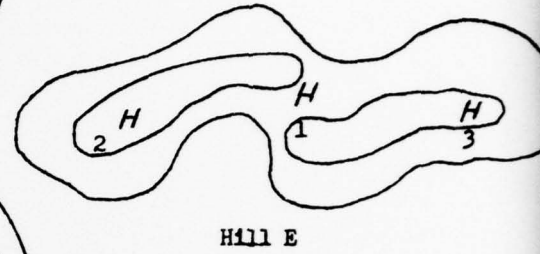
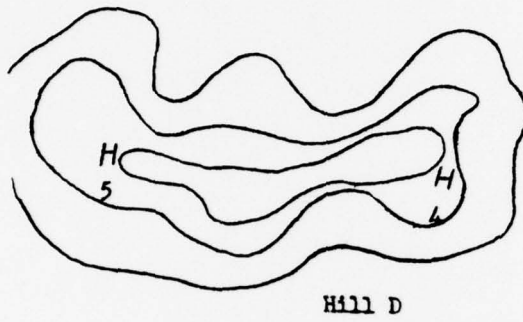
REPORT WHEN YOU ARE READY TO BEGIN.

Problem IX



Problem II

Map **B**



PROBLEM IX - (Continued)

4. SOLUTION AND SCORING	<u>Value</u>	<u>Score</u>
(1) Assembles tank commanders	1	_____
(2) Makes visual reconnaissance of area	1	_____
(3) Makes map reconnaissance of area	1	_____
(4) Explains situation to tank commanders	1	_____
(5) Issues platoon order, and mentions	1	_____
(a) Enemy force	1	_____
Strength (3 battalions)	1	_____
Direction of movement (south)	1	_____
Capability (attack)	1	_____
(b) Friendly force	1	_____
Platoon mission	1	_____
Initial delay position (<u>HILLS "D"</u> <u>and "E"</u>)	1	_____
Final delay position (<u>HILLS "A"</u> <u>and "B"</u>)	1	_____
Fire support (NONE)	1	_____
Attachments (NONE)	1	_____
Report when ready	1	_____
(6) Moves section on HILL "D" back to HILL "C" 2		_____
(a) Section moved to <u>HILL "C"</u> with turrets traversed to rear or flank	1	_____
(b) Moved into position on <u>HILL "C"</u> by moving around the flank of <u>HILL</u> <u>"C"</u>	1	_____
(c) Section on <u>HILL "C"</u> reported when in position	1	_____
(d) Designated manner of movement	1	_____

PROBLEM IX - (Continued) (Solution and Scoring)		<u>Value</u>	<u>Score</u>
(7)	Moves section on <u>HILL "E"</u> back to <u>HILL "B"</u>	2	_____
(a)	Section moves to <u>HILL "B"</u> with turrets traversed to rear or flanks	1	_____
(b)	Moves into position on <u>HILL "B"</u> by moving around the flank of <u>HILL "B"</u>	1	_____
(c)	Designated manner of movement	1	_____
(8)	Moved section on <u>HILL "C"</u> back to <u>HILL "A"</u>	1	_____
(a)	Section moved to <u>HILL "A"</u> with turrets traversed to rear or flank	1	_____
(b)	Moved into position on <u>HILL "A"</u> by moving around the flank of <u>HILL "A"</u>	1	_____
(c)	Moved the section to <u>HILL "A"</u> by moving between <u>HILLS "A"</u> and <u>"B"</u>	1	_____
(d)	Designated manner of movement	1	_____
(9)	Assigns targets to the tanks on <u>HILL "B"</u> against enemy moving from <u>HILL "E"</u>	1	_____
(10)	Assigns targets to the tanks on <u>HILL "A"</u> against enemy moving from <u>HILL "D"</u>	1	_____
(11)	Moves section on <u>HILL "B"</u> through lane in woods and attacks enemy flanking <u>HILL "B"</u>	4	_____
(a)	Designated manner of movement	1	_____
(12)	Remains on <u>HILL "B"</u> and has the section on <u>HILL "A"</u> take the enemy under fire as they round the trees on the right flank of <u>HILL "B"</u>	2	_____
(a)	Shifts fire of section on <u>HILL "B"</u> to <u>HILL "C"</u>	1	_____
(13)	Any action taken by the platoon leader other than that designated on the Score Sheet is worth ONE point for the entire action taken.	1	_____
(14)	Completes problem with NO tank losses	15	_____
(15)	Completes problem with ONE tank loss	10	_____

PROBLEM IX - (Continued) (Solution and Scoring) Value Score

(16) Completes problem with TWO tank losses 5 _____

(17) Completes problem with THREE tank losses 2 _____

(18) Completes problem with FOUR tank losses 1 _____

POSSIBLE SCORE 54

SCORE MADE _____

(19) Deduct five (5) points from SCORE MADE
if incorrect radio procedure was made
habitually used. 5 _____

TOTAL SCORE _____

FM-17-1 Paragraphs 91 through 93, (estimate of the situation)

Paragraphs 412 through 414, 422, 424, 429a,b.

FM-17-33 Paragraphs 145, 148, 149, 154, 155, 156, 157d,e,f.

PROBLEM X - (THREE PARTS) - Advance Guard; Use of Terrain; Movement by Bounds; Atomic Explosion; Developing the Situation; Assignment of Targets; Delaying Action

(Problem is in 3 parts - 3 Terrain Changes)

1. GENERAL

a. Terrain. The terrain for this problem is continuous and necessitates two (2) changes. See Map "A" (1), (2), and (3). For Problem 1, the curtain will be closed. For Problems 2 and 3, the curtain will be open. In each instance (2) that the terrain is changed, the last terrain feature (extreme north end) will be placed at the extreme south end, indicating that the problem is continuous.

NOTE: This point will be brought to the attention of the Test Platoon prior to the start of this three-stage problem.

b. The Enemy. The enemy will consist of two (2) enemy tanks for Stage 1 and Stage 2. Stage 3 will require eight (8) tanks. However, the problem is written (See paragraph 2) so that the five (5) aggressor personnel (ASSISTANT INSTRUCTORS) can do the job. Two (2) smoke missions will be prepared; Smoke Mission Nr 1 will be fired; Smoke Mission Nr 2 will not be fired unless Test Platoon action makes it feasible (See paragraph 2). The INSTRUCTOR will control all enemy tank action through his control of the ASSISTANT INSTRUCTORS. The two (2) enemy smoke missions will be controlled by the INSTRUCTOR from his control panel. ASSISTANT INSTRUCTORS will fire "cracker-ball" ammo, and direct "killing" light beams as ordered by the INSTRUCTOR. (See Maps "A"(1), (2), and (3).) The enemy tanks will be located as shown.

c. Test Platoon. The Test Platoon will be located and sited for each of the three stages as shown on Maps "A" and "B"(1), (2), and (3). The platoon organization, after Stage 1, will be dependent upon whether or not the platoon has suffered any tank casualties. The problem will be "free play" as far as the Test Platoon is concerned. ASSISTANT INSTRUCTORS will provide "cracker-ball" ammo to simulate friendly artillery, if the platoon leader requests artillery. Two (2) smoke missions are available to the platoon; these are in Stage 3 and are located in WOODS "X" and "Y". Any other request for smoke will be denied. All Test Platoon tanks destroyed by enemy action (including those destroyed by ASSISTANT INSTRUCTORS) will remain out of action for the duration of the problem--this means ALL THREE STAGES. In the event the platoon leader is a casualty, the INSTRUCTOR will appoint the platoon sergeant to take command; if both the platoon leader and platoon sergeant become casualties, the INSTRUCTOR will designate a tank commander to assume command, with the resultant loss of communications to the team commander (INSTRUCTOR) but retaining communications over the platoon net with the remaining tanks. A NEW PLATOON LEADER WILL BE APPOINTED AT THE BEGINNING OF EACH STAGE - no briefing will accompany this change; however, a critique of each stage will be conducted while the terrain is being changed for the next stage. Provisions of paragraph 1d below

PROBLEM X - (Continued)

will be adhered to in each stage.

NOTE: The INSTRUCTOR will not respond to any calls made from any tank other than the Platoon Leader's or Platoon Sergeant's tank.

d. The Instructor. The INSTRUCTOR will be responsible for being completely familiar with the entire contents of this document. He will act as the Test Platoon team commander, and as controller of the enemy. The INSTRUCTOR will control all enemy fire and movement, including the use of "cracker-ball" ammo and the ASSISTANT INSTRUCTOR'S use of the spot light to knock out Test Platoon tanks, if required. The INSTRUCTOR will control all smoke missions (friendly and enemy) from his control panel. He will direct ASSISTANT INSTRUCTORS to place "cracker-ball" ammo (simulating friendly artillery) as requested by the Test Platoon commander. The CHIEF ASSISTANT INSTRUCTOR will plot all enemy and Test Platoon tank moves on a copy of Map "A". In the event the Test Platoon loses four (4) tanks to enemy action BEFORE the problem is completed, the INSTRUCTOR will appoint another platoon leader, reactivate the destroyed tanks, and run the problem again without benefit of a critique. Only completed stages of the problem will be critiqued.

2. CONCEPT OF THE PROBLEM

a. Platoon Mission. To be the advance guard for the company team, which is on a semi-independent mission, whose mission is to seize and secure the railroad bridge over the RIVER JORDAN.

b. Starting of the Problem. The problem will begin with the INSTRUCTOR and Test Platoon leader conferring on the floor in front of the control platform. All other platoon personnel will be assembled behind the platform where they cannot overhear the INSTRUCTOR and platoon leader. The INSTRUCTOR will issue the oral Operation Order to the platoon leader, and give him five (5) copies of Map "B". In the meantime (back at the ranch), the CHIEF ASSISTANT INSTRUCTOR will assign three (3) men to each tank, designating who will be driver, loader, tank commander, and platoon sergeant. (The TC in the 4th tank will be the platoon sergeant.) The platoon leader will be given 15 minutes to make his visual and map reconnaissance, brief the platoon, and issue his order to the tank commanders. During this 15 minute period, the INSTRUCTOR will alert his ASSISTANT INSTRUCTORS, check their communications, and make any final supervisory inspections necessary. When the platoon leader notifies the INSTRUCTOR that the platoon is ready to begin, the INSTRUCTOR (team commander) will order the platoon leader to "MOVE OUT." During the interval between Stage 1 and Stage 2, and between Stage 2 and Stage 3, (while the terrain is being changed) the INSTRUCTOR will give the Test Platoon a 10-minute break after the critique; in addition, after Stage 2 the INSTRUCTOR will check the aggressor dispositions and briefly review the aggressor action to ensure a smooth performance.

c. Stage Nr 1 (TWO PHASES)

(1) Phase 1. The Test Platoon will move forward as directed by

PROBLEM X - (Continued)

the platoon leader. (The curtain is closed at the center of the terrain board.) No enemy action takes place during this phase. As Test Platoon (or any tanks therein) move up on HILL "D", the INSTRUCTOR will open the curtain and reveal the remainder of the terrain complex. The opening of the curtain signals the beginning of Phase 2.

(2) Phase 2. (The curtain is open.) The INSTRUCTOR will order enemy tanks 1 and 2 to fire at 1) the test tanks on HILL "D", or 2) the test maneuver (moving) element going from HILL "B" to "D". ASSISTANT INSTRUCTORS will be directed to fire "cracker-ball" ammunition at HILL "D", and/or at the test maneuver element. Any Test Platoon request for mortar support will be denied - "MORTAR SUPPORT NOT AVAILABLE AT THIS TIME. THEY ARE FIRING ANOTHER MISSION. OUT."

(a) If the Test Platoon maneuvers to the left (west) of WOODS "B", with a base of fire on HILL "D" or in the forward edge of WOODS "A", the INSTRUCTOR will order enemy tanks 1 and 2 to pull back out of problem, and the ASSISTANT INSTRUCTORS to cease firing "cracker-ball" ammo.

(b) If the Test Platoon attempts to maneuver to the right (east) of WOODS "H", regardless of where the base of fire is located, the INSTRUCTOR will order ASSISTANT INSTRUCTORS to destroy one (1) test tank with a light beam in the maneuver element, then order enemy tanks 1 and 2 to pull back.

(c) If the Test Platoon assaults HILL "F" frontally, or from the right (east) of WOODS "A", or through WOODS "A", without a base of fire, the INSTRUCTOR will order ASSISTANT INSTRUCTORS to destroy, with a light beam, two (2) test tanks; then order enemy tanks 1 and 2 to pull back.

(d) If the Test Platoon maneuvers to the left (west) around WOODS "B" without a base of fire, the INSTRUCTOR will order ASSISTANT INSTRUCTORS to destroy, with a light beam, one (1) test tank as it moves in the open between WOODS "B" and HILL "D" or WOODS "A".

(e) Phase 2 ends as the Test Platoon takes positions on HILL "F". Stage 1 will be critiqued; platoon will be given a 10-minute break, and the terrain for Stage 2 will be emplaced. HILL "F" will be placed as shown on Map "A"(2) and Map "B"(2), with the test tanks in the same position as at the completion of Stage Nr 1, Phase 2.

d. Stage 2. The curtain will be open, exposing the entire terrain board. The Test Platoon will take their same positions on the control platform, and operate the same tanks, EXCEPT that a new platoon leader will control the platoon from the platoon leader's tank. When the platoon is ready, the INSTRUCTOR (team commander) will order, "MOVE OUT."

(1) Phase 3. Phase 3 begins when the platoon, or any portion of the platoon, begins to move off HILL "F". Regardless of the Test Platoon combat formation, or method of advance, no enemy action will be used until the lead tank (or tanks) begins to take position on HILL "J". At this

PROBLEM X - (Continued)

time, the INSTRUCTOR will order enemy tanks Nr 1 and 2 to open fire; and the INSTRUCTOR will order ASSISTANT INSTRUCTORS to fire "cracker-ball" ammo at the forward slope of HILL "J". Phase 3 ends when the Test Platoon is on HILL "J".

(2) Phase 4. Phase 4 begins when the Test Platoon is on HILL "J"; or if the Test Platoon begins to maneuver around HILL "J".

(a) If the Test Platoon, or any tanks therein, begin to move north on COOK ROAD, off HILL "J", the INSTRUCTOR will order ASSISTANT INSTRUCTORS to destroy these tanks (lead tank first) with a light beam. "Cracker-ball" ammo will also be used. The same procedure will be used on any test tank which moves over the crest of HILL "J".

(b) If the Test Platoon requests supporting fires placed on HILL "G", the request will be denied - "BATTALION MORTAR PLATOON IS FIRING ANOTHER MISSION - OUT."

(c) If the Test Platoon uses a base of fire on HILL "J", and maneuvers another section either to the right or left of HILL "J" to either the right or left of HILL "G", the INSTRUCTOR will continue having ASSISTANT INSTRUCTORS fire "cracker-ball" ammo, and enemy tanks Nr 1 and 2 continue firing until the test maneuver element has covered three-fourths of the distance between HILLS "J" and "G". Then the INSTRUCTOR will order enemy tanks Nr 1 and 2 to pull back, and ASSISTANT INSTRUCTORS to cease firing cracker-ball ammo.

NOTE: The Test Platoon maneuver element must assault the same flank it attacks from, i.e., if the maneuver element moves around the right (east) base of HILL "J", it must assault the right (east) side of enemy-held HILL "G". If the maneuver element crosses to the left (west) side of HILL "G", the INSTRUCTOR will cause two (2) tanks of the maneuver element to be destroyed by ASSISTANT INSTRUCTOR light beams.

(d) If the Test Platoon maneuvers the entire platoon (or what is left of it at this point) either right or left of HILL "J" without a base of fire, the INSTRUCTOR will cause two (2) tanks to be destroyed by light beams.

(e) If the Test Platoon has but two (2) tanks remaining in the platoon, and these are assaulting HILL "G", the INSTRUCTOR will permit enemy tanks Nr 1 and 2 and the two remaining test tanks to maneuver and fight the battle with light beams, from their gun tubes, until the bitter end.

(f) Phase 4 ends with the occupation of HILL "G" by Test Platoon tanks, or as specified in paragraph 1d above. The same procedure as outlined in paragraph 2c(2)(e) above will be followed at this point, EXCEPT that HILL "F" will be placed at the south end of the terrain board, with test tanks located in the same positions they occupied at the end of Phase 4. The remainder of the terrain board will be set up as shown on Maps "A"(3) and "B"(3).

PROBLEM X - (Continued)

e. Stage 3. The curtain will be open, exposing the entire terrain terrain complex. The Test Platoon (or remaining portion thereof) will take the same positions on the control platform and operate the same tanks, EXCEPT that a new platoon leader will command the platoon from the platoon leader's cubicle. When the platoon is ready, the INSTRUCTOR will order, "MOVE OUT."

(1) Phase 5. Phase 5 begins with the Test Platoon in position on HILL "G". No enemy action will take place as the platoon moves from HILL "G" to HILL "H", regardless of the combat formation or method of advance. However, the INSTRUCTOR, at the first indication that a move off HILL "G" is forthcoming, will call the Test Platoon leader and say, "I HAVE JUST RECEIVED NOTIFICATION THAT A FRIENDLY ATOMIC DEVICE WILL BE DETONATED IN TEN MINUTES IN THE AREA BETWEEN WOODS "X" AND WOODS "Y" NORTH OF THE RAILROAD TRACKS. I WILL GIVE YOU THE COUNT-DOWN AT "H MINUS ONE." TAKE ALL NECESSARY PRECAUTIONS. OVER."

(a) At "H MINUS ONE" the INSTRUCTOR will inform the platoon leader "ONE MINUTE." At "H MINUS 30 SECONDS" the INSTRUCTOR will inform the platoon leader, "THREE ZERO SECONDS." At "H MINUS 10 SECONDS," the INSTRUCTOR will give the platoon leader the final count-down, "10-9-8-7-6-5-4-3-2-1-0." At "0" the INSTRUCTOR will set off the atomic simulator. Fifteen seconds later, the INSTRUCTOR will inform the platoon leader, "ALL CLEAR. CONTINUE ON MISSION."

(b) No enemy action will take place as the Test Platoon moves from HILL "G" to HILL "H", regardless of the combat formation or method of attack used. However, as the Test Platoon (or any part thereof) begins to move toward HILL "I", the INSTRUCTOR will fire the two enemy AT guns in WOODS "Y", and order ASSISTANT INSTRUCTORS to fire "cracker-ball" ammo at the advancing tanks. Then, the INSTRUCTOR will order enemy tanks Nr 4 and 5 to move out and occupy positions indicated on Map "A"(3), and fire at test tanks on HILL "I". An ASSISTANT INSTRUCTOR will be ordered to fire "cracker-ball" ammo at HILL "I", while the other ASSISTANT INSTRUCTOR fires "cracker-ball" ammo at HILL "H".

(c) If the platoon leader requests smoke on WOODS "X" and "Y", the INSTRUCTOR will honor this request.

NOTE: Only ONE firing of smoke is available.

(d) If the platoon leader does not move the tanks from HILL "H" to HILL "I", so as to consolidate his platoon on HILL "I", the INSTRUCTOR will call the platoon leader and inquire into the reason for the hold-up, and then tell him to get moving.

(e) If the platoon leader orders the tanks on HILL "H" to maneuver to the right (east) of HILL "J", the INSTRUCTOR will cause these tanks to be destroyed by use of ASSISTANT INSTRUCTOR'S light beam, and then instruct enemy tanks Nr 1, 2, and 3 to execute Plan Nr 1. (INSTRUCTOR will set off enemy smoke screen Nr 1.)

PROBLEM X - (Continued)

1. If, under the conditions cited in (e) above, the remaining test tanks on HILL "I" choose to remain on HILL "I", the INSTRUCTOR will fire enemy smoke screen Nr 2, and order enemy tanks Nr 1, 2, and 3 to execute Plan Nr 2. Destroy with light beam tanks on HILL "I".
2. If, under the conditions cited in (e) above, the test tanks on HILL "I" choose to fall back to HILL "H", the INSTRUCTOR will fire enemy smoke Nr 2, and order enemy tanks Nr 1, 2, and 3 to execute Plan Nr 3. Destroy with light beam tanks on HILL "H".

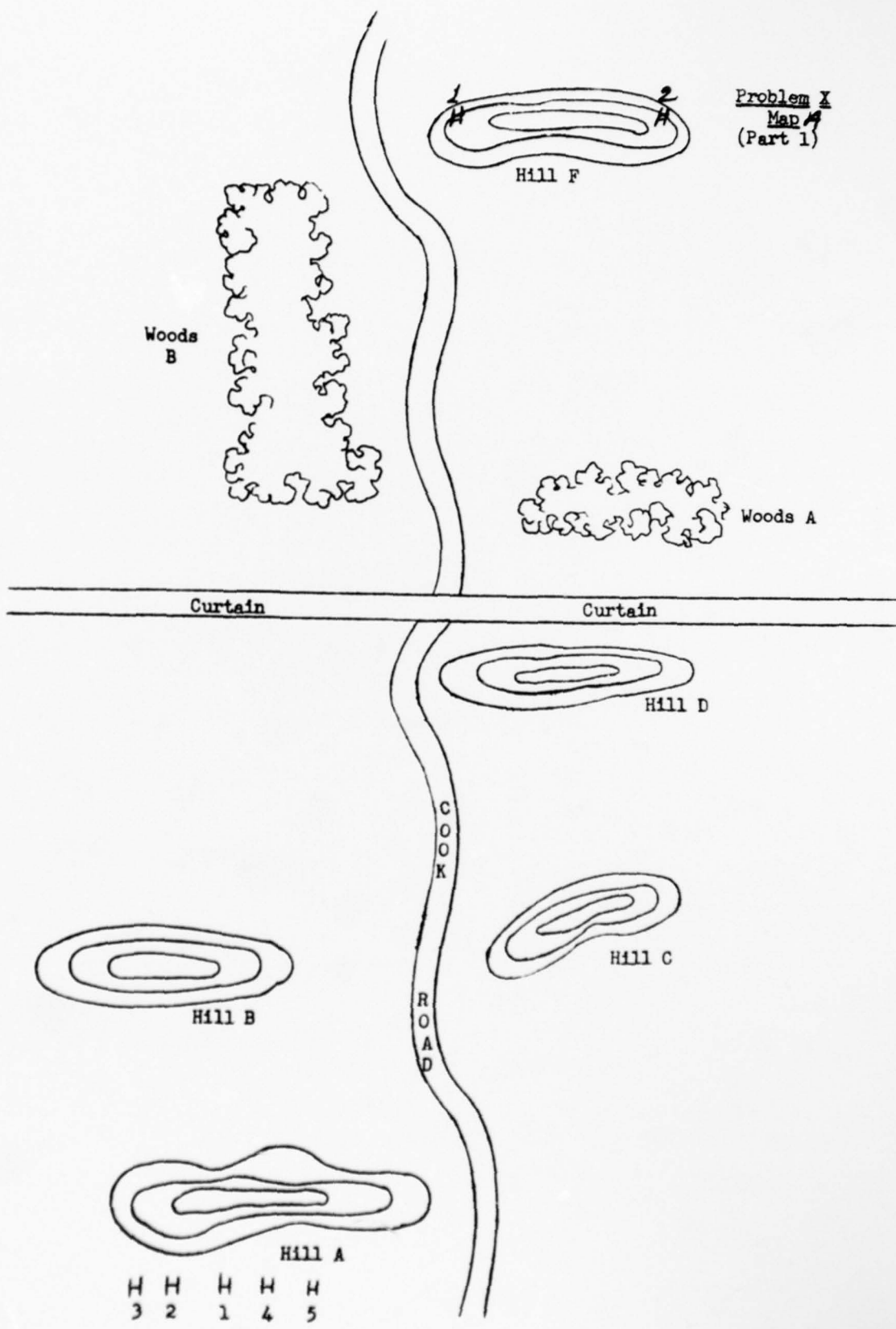
(f) If the entire platoon (or what remains of it) is located on HILL "I", the INSTRUCTOR will fire enemy smoke Nr 1, and order enemy tanks Nr 1, 2, and 3 to execute Plan Nr 1.

1. If, under these conditions, the platoon leader requests permission to move back, the INSTRUCTOR will order, "PERMISSION GRANTED, MOVE BACK TO HILL "G" AND SET UP BASE OF FIRE. THE TEAM WILL ATTACK IN 10 MINUTES. OVER."
2. If the friendly smoke mission on WOODS "X" and "Y" have not been previously fired, and the platoon leader requests smoke on the woods, the INSTRUCTOR will honor the request; otherwise, the request will be denied as not available.
3. If the platoon moves one section to HILL "H" while the remaining section on HILL "I" attempts to engage the enemy element behind the screen (or while on HILL "J") no platoon casualties will be assessed. (However, some may occur naturally.) Then, if the remaining section on HILL "I" moves back to HILL "G" under protection of tanks on HILL "H", no casualties will be assessed; and if the section on HILL "H" moves back to HILL "G" under protection of section on "G", no casualties will be assessed.
4. If the platoon moves one section to HILL "H", and then moves the other section to HILL "H", the INSTRUCTOR will, when the second section is committed to ascending HILL "H", fire enemy smoke Nr 2, and order enemy tanks 1, 2, and 3 to execute Plan Nr 3. Plan Nr 3 will also be used if the Test Platoon moves as a unit to HILL "H".
5. If the Test Platoon moves one section from HILL "I" to HILL "G", the INSTRUCTOR will cause one tank on HILL "I" to be destroyed by ASSISTANT INSTRUCTOR light beam. Then as the other tanks on HILL "I" attempt to pull back to either HILL "H" or HILL "G", the INSTRUCTOR will cause them to be destroyed by ASSISTANT INSTRUCTOR light beams.

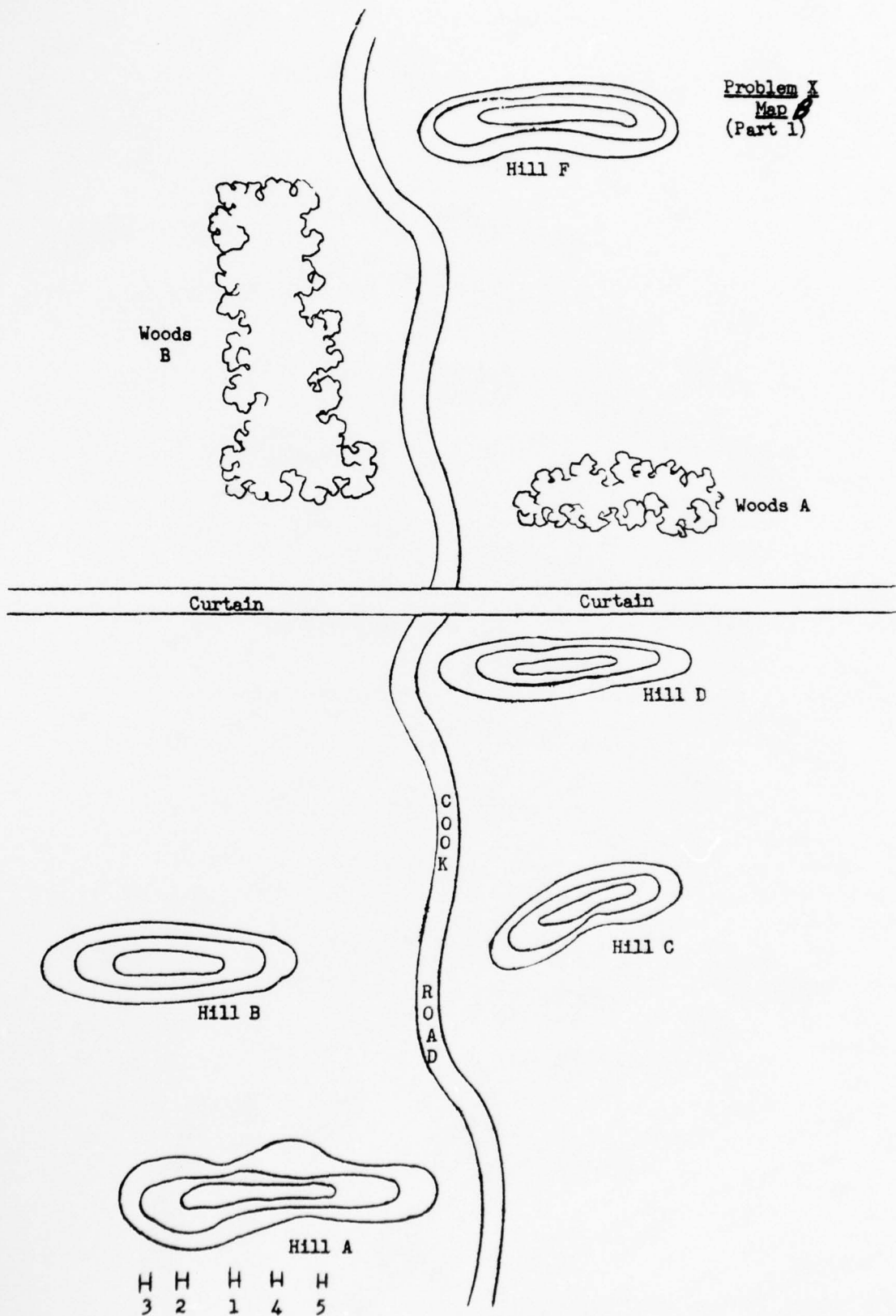
PROBLEM X - (Continued)

6. If the Test Platoon attempts to move the entire platoon from HILL "I" to HILL "G", the INSTRUCTOR will cause three (3) tanks to be destroyed by ASSISTANT INSTRUCTOR'S light beams.
3. OPERATION ORDER (To be issued orally to the platoon leader, along with five (5) copies of Map "B".)
 - a. Enemy. AN ENEMY ARMORED FORCE HAS BEEN CONDUCTING A DELAYING ACTION FOR THE PAST 24 HOURS. THEIR TACTICS HAVE BEEN MORE ANNOYING THAN EFFECTIVE, YET THE FEELING PREVAILS THAT THEY ARE JUST WAITING FOR THE PROPER MOMENT TO LAUNCH A COUNTERATTACK.
 - b. Friendly. OUR TEAM HAS BEEN ADVANCING QUITE RAPIDLY AGAINST SPORADIC RESISTANCE. THE MISSION OF OUR TEAM IS TO SEIZE THE RAILROAD BRIDGE OVER THE RIVER JORDAN. THE TEAM IS ADVANCING IN COLUMN. THE FIRST PLATOON IS THE ADVANCE GUARD.
 - (1) FIRST PLATOON, YOUR MISSION IS TO BE THE ADVANCE GUARD FOR OUR TEAM WHICH IS ON A SEMI-INDEPENDENT MISSION. BE ALERT FOR AN ENEMY COUNTER-ATTACK WHEN YOU REACH THE VICINITY OF HILL "I".
 - (2) YOU WILL NOT HAVE ANY ATTACHMENTS.
 - (3) THE BATTALION MORTAR PLATOON WILL BE IN GENERAL SUPPORT, WITH PRIORITY OF FIRES FOR YOUR PLATOON.
 - (4) I WILL BE WITH THE SECOND PLATOON.
 - (5) IT IS NOW _____ HOURS.
 - (6) ANY QUESTIONS?
 - (7) REPORT WHEN READY TO MOVE OUT.

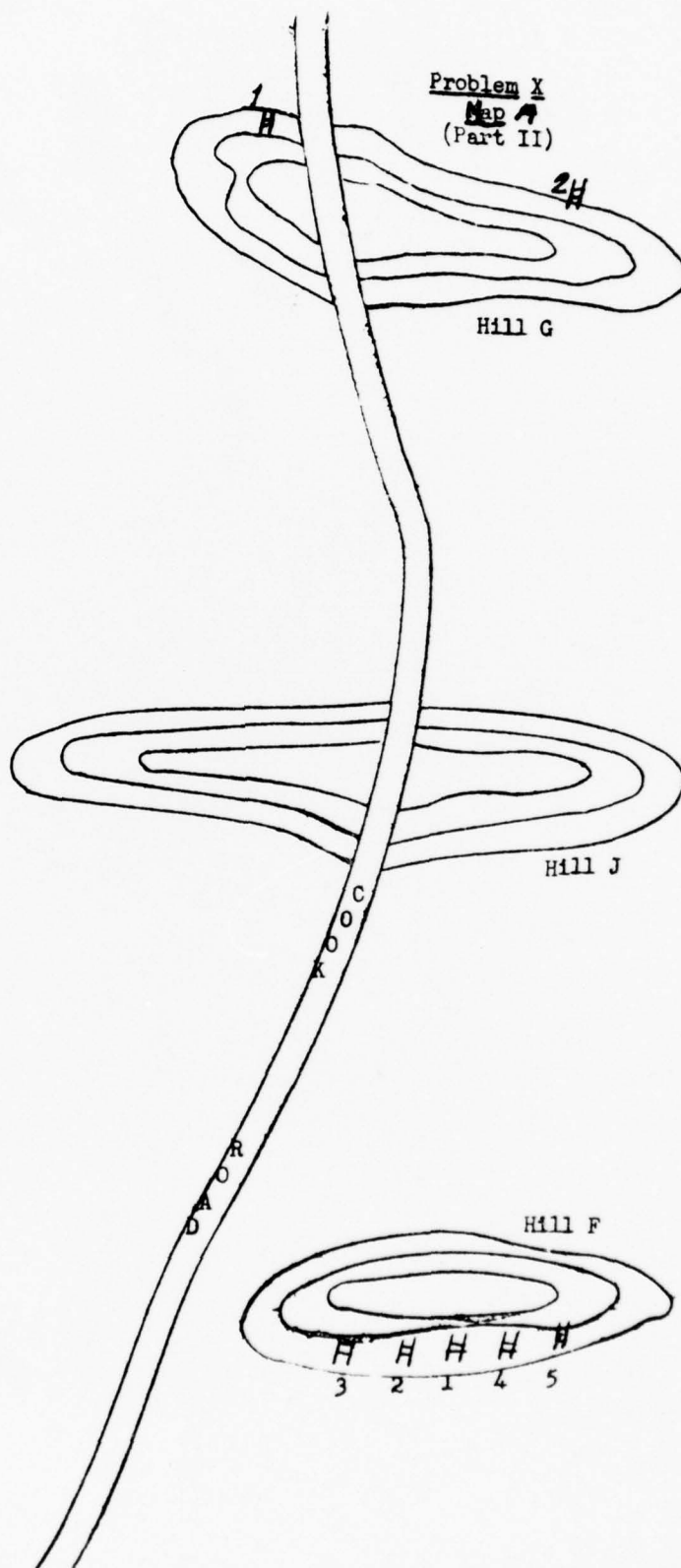
Problem X
Map 19
(Part 1)



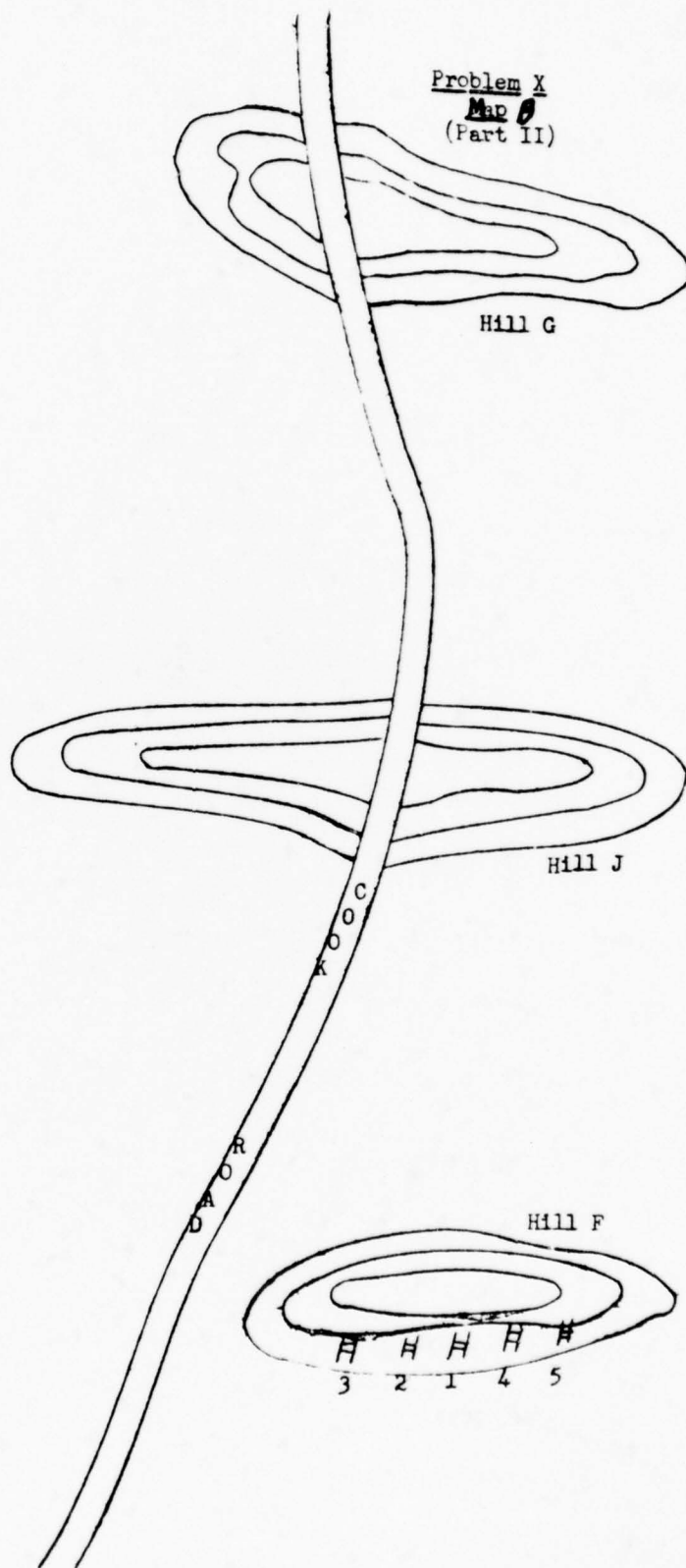
Problem X
Map
(Part 1)

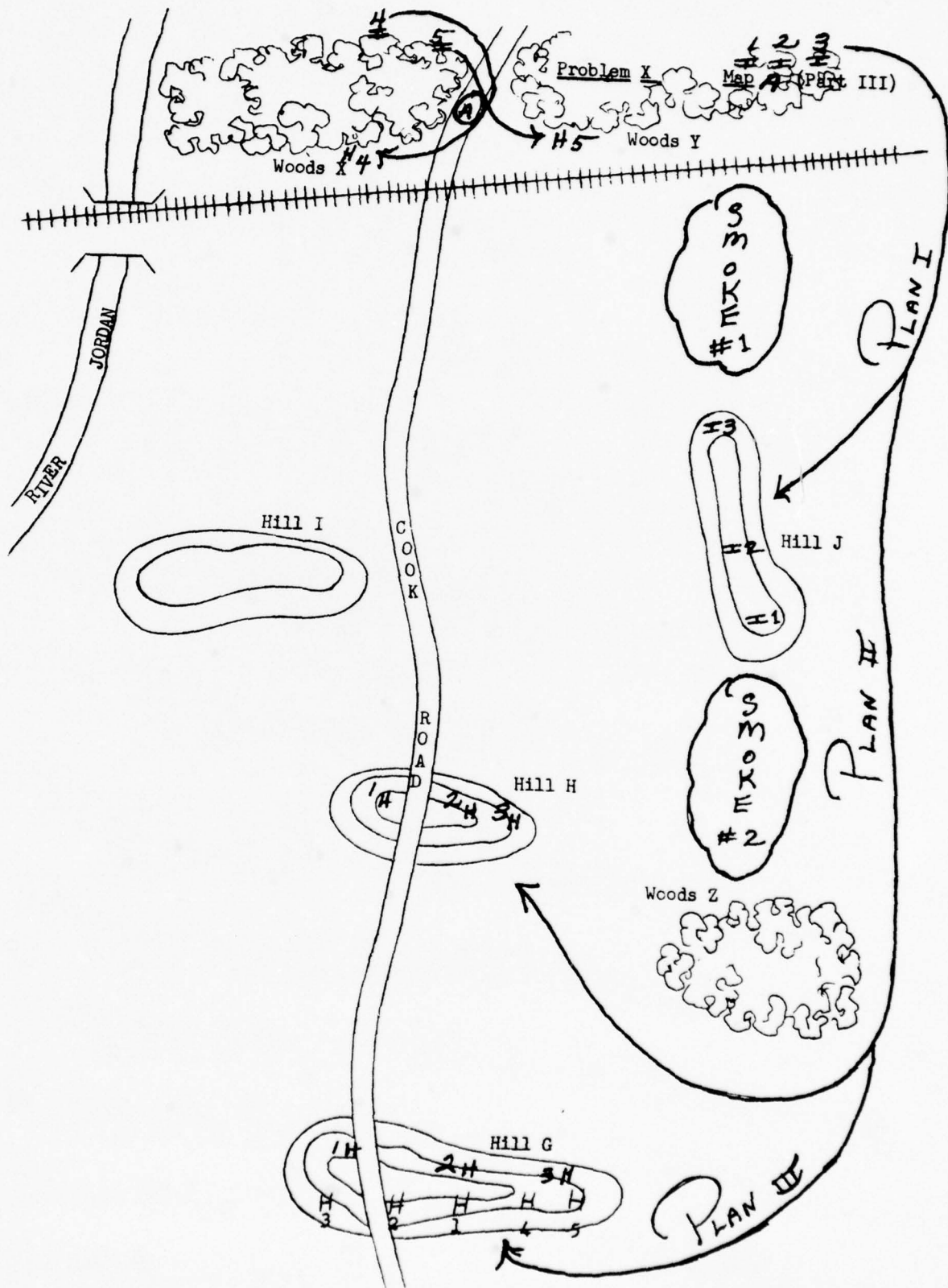


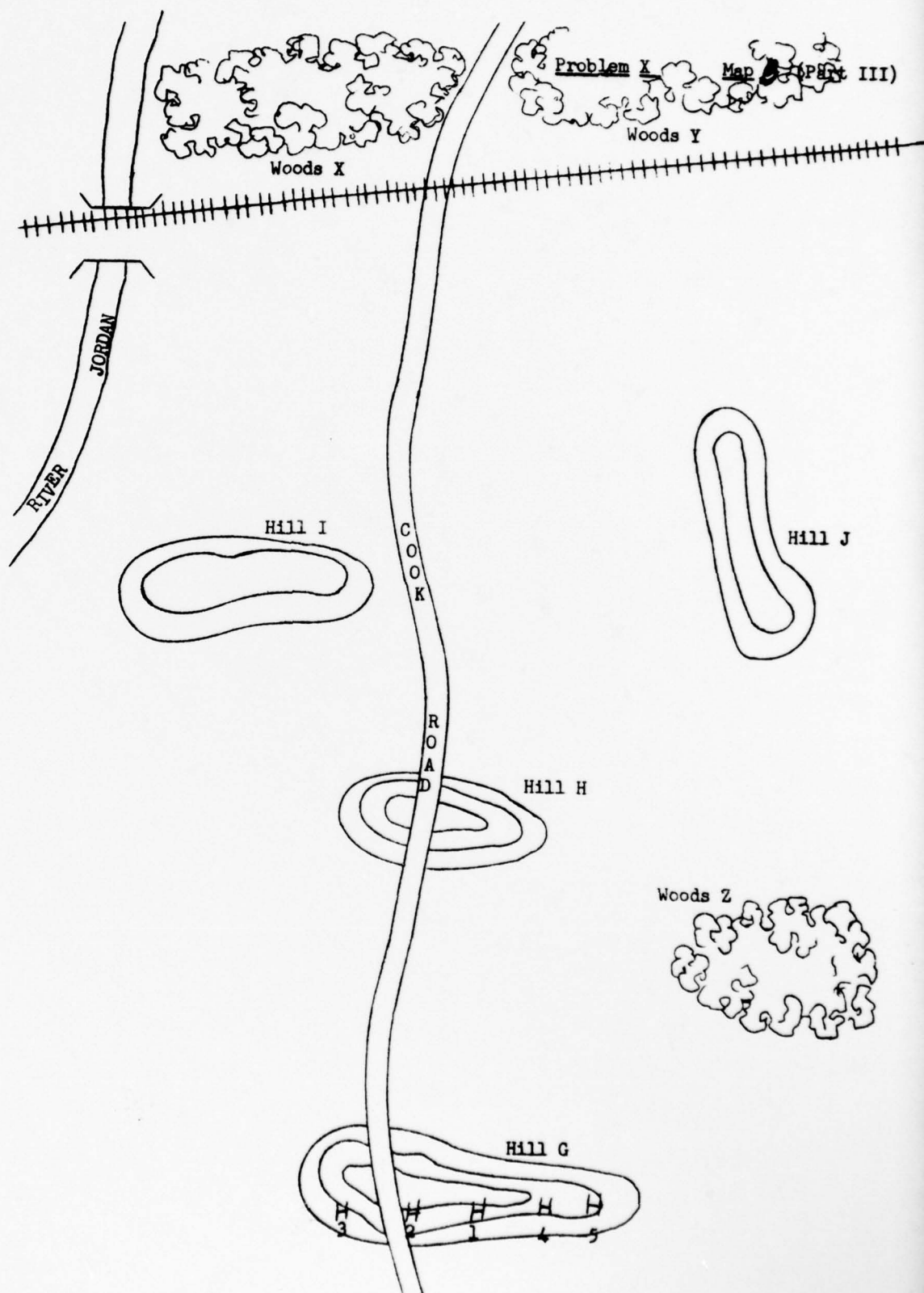
Problem X
Map 4
(Part II)



Problem X
Map 0
(Part II)







PROBLEM X - (Continued)

4. SOLUTION AND SCORING

PART I		<u>Value</u>	<u>Score</u>
(1)	Moves entire platoon to HILL "A"	$\frac{1}{2}$	_____
(2)	Moves section to HILL "A"	2	_____
	(a) Designates manner of movement	1	_____
	(b) Reported when in position	1	_____
(3)	Moved section to HILL "B" or "C"	1	_____
	(a) Moved around flank of HILL "A"	1	_____
	(b) Moved in line or wedge formation	1	_____
	(c) Designated manner of movement	1	_____
	(d) Reported when in position	1	_____
(4)	Moved section on HILL "A" to HILL "B" or "C"	1	_____
	(a) Moved around flank of HILL "A"	1	_____
	(b) Designated manner of movement	1	_____
	(c) Reported when in position	1	_____
(5)	Moved section on HILL "C" to HILL "D"	2	_____
	(a) Moved around the flank of HILL "C"	2	_____
	(b) Designated manner of movement	1	_____
	(c) Reported when in position	1	_____
(6)	Moved section from HILL "B" to HILL "D"	1	_____
	(a) Moved around flank of HILL "B"	1	_____
	(b) Moved to HILL "D" in echelon left formation	1	_____
	(c) Designated manner of movement	1	_____
(7)	Reports position to team commander	1	_____
(8)	Any action taken by the platoon leader other than that designated in the Scoring Sheet is worth <u>one</u> point for the entire action taken.	1	_____

PART I POSSIBLE SCORE 24

SCORE MADE _____

PROBLEM X - (Continued) (Solution and Scoring)

PART II		Value	Score
(1)	Reconnoiters WOODS "A" by fire	1	_____
(2)	Reconnoiters WOODS "B" by fire	1	_____
(3)	Sets up base of fire on HILL "D"	1	_____
	(a) Designates tanks to act as base of fire	1	_____
(4)	Moves section to HILL "F"	2	_____
	(a) Moves around flank of HILL "D"	1	_____
	(b) Moves around left flank of WOODS "B"	1	_____
	(c) Designates manner of movement	1	_____
(5)	Requests supporting fires on HILL "F"	1	_____
(6)	Moves from WOODS "B" to HILL "F"	2	_____
	(a) Moves in line or wedge formation	1	_____
	(b) Assigns targets for section	1	_____
	(c) Designates manner of movement	1	_____
(7)	Lifts supporting fires before reaching HILL "F"	1	_____
(8)	Orders base of fire, CEASE FIRE	1	_____
(9)	Moves base of fire to HILL "F"	1	_____
	(a) Designates manner of movement	1	_____
(10)	Reports to team commander	1	_____
(11)	Any action taken by the platoon leader other than that designated in the Scoring Sheet is worth <u>one</u> point for entire action taken.	1	_____

PART II POSSIBLE SCORE 20

SCORE MADE _____

PART III			
(1)	Requests supporting fire on HILL "G"	1	_____
(2)	Moved maneuver section to HILL "J"	2	_____
	(a) Moved around flank of HILL "F"	1	_____

PROBLEM X - (Continued)(Solution and Scoring)		<u>Value</u>	<u>Score</u>
(b)	Moved in line or wedge formation	1	_____
(c)	Designates tanks to act as base of fire	1	_____
(d)	Designates manner of movement	1	_____
(3)	Moved base of fire from HILL "F" to HILL "J"	1	_____
(a)	Moved around flank of HILL "F"	1	_____
(b)	Designates manner of movement	1	_____
(4)	Moved entire platoon to HILL "J"	1	_____
(a)	Moved around flank(s) of HILL "F"	1	_____
(b)	Moved in line or wedge formation	1	_____
(5)	Moved maneuver section to HILL "G"	2	_____
(a)	Moved around either flank of HILL "J"	1	_____
(b)	Moved in line or wedge formation	1	_____
(c)	Designates tanks to act as base of fire	1	_____
(d)	Designates manner of movement	1	_____
(6)	Moved entire platoon to HILL "G"	1	_____
(a)	Moved around flank(s) of HILL "J"	1	_____
(b)	Moved in line or wedge formation	1	_____
(7)	Continued supporting fire on HILL "G" after reaching HILL "J"	1	_____
(8)	Lifts supporting fire on reaching HILL "G"	1	_____
(9)	Orders base of fire to CEASE FIRE	1	_____
(10)	Moves base of fire to HILL "G"	1	_____
(a)	Moves around flank of HILL "J"	1	_____
(b)	Designates manner of movement	1	_____
(11)	Reports to team commander	1	_____
(12)	Any action taken by the platoon leader other than that designated in the Scoring Sheet is worth <u>one</u> point for the entire action taken.	1	_____

PART III POSSIBLE SCORE 23

SCORE MADE.....

PROBLEM X - (Continued)(Solution and Scoring)

PART IV		<u>Value</u>	<u>Score</u>
(1)	Reconnoiters WOODS "Z" by fire	1	_____
(2)	Alerts the platoon that atomic blast is due in ten (10) minutes	1	_____
(3)	Issues orders to the platoon to prepare for the atomic blast	1	_____
(a)	Orders tanks to halt and pull back to HILL "G"	1	_____
(b)	Orders platoon to back down off the crest of HILL "G" into turret defilade position	1	_____
(c)	Orders platoon to keep their main guns traversed over the rear deck away from the blast	1	_____
(d)	Orders platoon to "button-up" all hatches	1	_____
(e)	Orders platoon to pull all periscopes	1	_____
(f)	Orders platoon to shield their eyes on "count-down" and keep them shielded until the ALL CLEAR	1	_____
(4)	Alerts the platoon on the ALL CLEAR	1	_____
(a)	Orders platoon to prepare to move out, etc.	1	_____
(5)	Moves maneuver section to HILL "H"	1	_____
(a)	Moves around flank of HILL "G"	1	_____
(b)	Moves in line or wedge formation	1	_____
(c)	Designates manner of movement	1	_____
(d)	Designates tanks to act as base of fire	1	_____
(6)	Moves base of fire to HILL "H"	1	_____
(a)	Moves around flank of HILL "G"	1	_____
(b)	Designates manner of movement	1	_____
(7)	Moves entire platoon to HILL "G"	1	_____
(a)	Moves around flank(s) of HILL "G"	1	_____
(b)	Moves in line or wedge formation	1	_____

PROBLEM X - (Continued)(Solution and Scoring)		<u>Value</u>	<u>Score</u>
(8)	Moves section from HILL "H" forward	3	___
	(a) Moves around flank of HILL "H"	1	___
	(b) Moves in line or wedge formation	1	___
	(c) Designates manner of movement	1	___
	(d) Designates tanks to act as base of fire	1	___
(9)	Moves entire platoon forward from HILL "H"	2	___
	(a) Moves around flank(s) of HILL "H"	1	___
	(b) Moves in line or wedge formation	1	___
(10)	Deploys platoon or section to HILL "I" after receiving enemy fire	2	___
	(a) Designates manner of movement	1	___
(11)	Moves base of fire on HILL "H" to HILL "I"	1	___
	(a) Moves around left flank of HILL "H"	1	___
	(b) Designates manner of movement	1	___
(12)	Designates targets for platoon	1	___
	(a) Section on right side of HILL "I" takes targets in WOODS "Y"	1	___
	(b) Section on left side of HILL "I" takes targets in WOODS "X"	1	___
	(c) Section on HILL "I" takes targets in WOODS "X"	1	___
	(d) Section on HILL "H" takes targets in WOODS "Y"	1	___
(13)	Reports situation to team commander	1	___
	(a) Requests permission from team commander to pull back	2	___
(14)	Requests supporting fires on WOODS "X" and "Y"	1	___
(15)	Orders section on right side of HILL "I" to shift fire to enemy moving behind the smoke screen towards HILL "L"	2	___

PROBLEM X - (Continued)(Solution and Scoring)		<u>Value</u>	<u>Score</u>
	(a) Orders section on HILL "H" to shift fire to enemy moving behind the smoke screen towards HILL "L"	2	___
(16)	Requests smoke on WOODS "X" and "Y" to screen move back	1	___
(17)	Moves section on HILL "I" to HILL "H" to cover flank	3	___
	(a) Moves to HILL "H" with guns traversed toward exposed flank	1	___
	(b) Moves around flank of HILL "H" to get into position	1	___
	(c) Designates manner of movement	1	___
	(d) Designates tanks to act as base of fire	1	___
	(e) Section reports when in position on HILL "H"	1	___
	(f) Moves section on left side of HILL "I" to HILL "H"	1	___
(18)	Moves remaining section on HILL "I" to HILL "H"	1	___
	(a) Moves to HILL "H" with guns traversed toward exposed flank	1	___
	(b) Moves around flank of HILL "H" to get into position	1	___
	(c) Designates manner of movement	1	___
(19)	Moves entire platoon from HILL "I" to HILL "H"	2	___
	(a) Moves to HILL "H" with guns traversed toward exposed flank	1	___
	(b) Moves in echelon left formation	1	___
	(c) Moves around right flank of HILL "H" to get into position	1	___
(20)	Moves section on HILL "H" to HILL "G"	3	___
	(a) Moves to HILL "G" with guns traversed to cover exposed flank	1	___
	(b) Moves around the flank of HILL "G" to get into position	1	___

PROBLEM X - (Continued)(Solution and Scoring)

	<u>Value</u>	<u>Score</u>
(c) Designates manner of movement	1	___
(d) Designates tanks to act as base of fire	1	___
(e) Section reports when in position on HILL "G"	1	___
(f) Moves section on left side of HILL "H" to HILL "G"	1	___
(21) Moves remaining section on HILL "H" to HILL "G"	1	___
(a) Moves to HILL "G" with guns traversed to cover exposed flank	1	___
(b) Moves around flank of HILL "G" to get into position	1	___
(c) Designates manner of movement	1	___
(22) Moves entire platoon from HILL "H" to HILL "G"	2	___
(a) Moves to HILL "G" with guns traversed to cover exposed flank	1	___
(b) Moves in echelon left formation	1	___
(c) Moves around right flank of HILL "G" into position	1	___
(23) Moves section from HILL "I" to HILL "G" with section in place on HILL "H"	3	___
(a) Moves to HILL "G" with guns traversed to cover exposed flank	1	___
(b) Moves in echelon left or wedge formation	1	___
(c) Designates manner of movement	1	___
(d) Moves around flank of HILL "G" to get into position	1	___
(24) Lifts supporting fire on reaching HILL "G" with entire platoon	1	___
(25) Reports to team commander that platoon is now in position on HILL "G"	1	___
(26) Assigns areas of fire to individual tanks in his platoon	1	___

PROBLEM X - (Continued)(Solution and Scoring)		<u>Value</u>	<u>Score</u>
(27)	Any action taken by the platoon leader other than that designated in the Scoring Sheet is worth <u>one</u> point for the entire action taken.	1	_____
(28)	Completed the four-phase problem with NO tank losses	15	_____
(29)	Completed the four-phase problem with ONE tank loss	10	_____
(30)	Completed the four-phase problem with TWO tank losses	5	_____
(31)	Completed the four-phase problem with THREE tank losses	2	_____
(32)	Completed the four-phase problem with FOUR tank losses	1	_____

PART IV POSSIBLE SCORE 82

SCORE MADE....._____

POSSIBLE SCORE FOR ENTIRE FOUR-PART PROBLEM149

SCORE MADE FOR ENTIRE FOUR-PART PROBLEM_____

- (33) Deduct five (5) points from SCORE MADE FOR ENTIRE FOUR-PART PROBLEM if incorrect radio procedure was habitually used. 5

TOTAL SCORE FOR ENTIRE FOUR-PART PROBLEM_____

* * * * *

FM-17-1 Paragraphs 91 through 93, (estimate of the situation) paragraphs 119, 412 through 414, 422, 424, 429a,b.
 FM-17-33 Paragraphs 69, 114, 116, 135, 145, 148, 149, 154, 155, 156, 157d,e,f.

APPENDIX B: Sample Tactical Exercise (for Crew Training)

PROBLEM: ADVANCE, SEIZE CRITICAL TERRAIN, DENY ENEMY AN AVENUE OF APPROACH

1. General:

a. Terrain. The terrain will be emplaced as shown on attached Map A. The curtain will be closed in the center of the "battlefield," thereby screening from view a portion of TOWN, all of LIVE ROAD, and HILLS C and D.

b. Enemy. Enemy tanks will be located and sited as indicated on Map A. These enemy forces will be concealed from view, and each will be numbered as shown. The instructor will control all enemy activity. Whenever the instructor orders an enemy weapon to fire, assistant instructors will employ "cracker-ball" ammunition to alert the platoon to the fact that the platoon is under fire. Enemy casualties will be assessed by the instructor in response to correct test platoon action. The instructor will order enemy guns to fire whenever the test platoon does not employ reconnaissance by fire on an area in which an enemy weapon is located.

c. Test Platoon. The test platoon initially will be located as shown on Maps A and B. The platoon leader (assistant instructor) will give each tank commander a copy of Map B, and issue an oral operations order. The instructor will designate one of the trainees as platoon sergeant. The platoon leader will then complete a visual and map reconnaissance with the trainee designated as platoon sergeant. Next, the platoon leader briefs his tank commanders and issues his attack order. Casualties in the test platoon should be allowed to occur normally as the platoon employs improper, incorrect, or faulty tactics and techniques. (See paragraph b above and paragraph d below.) All test platoon tanks knocked out by enemy action will remain out of action for the duration of the problem.

d. The Instructor and Platoon Leader (Assistant Instructor). The instructor and assistant instructor will be completely familiar with this document. In addition, the instructor will act as the company commander, and will respond to all calls made by the platoon leader or platoon sergeant. When the platoon leader indicates he is ready to proceed with the problem after briefing his crews, the instructor will command, MOVE OUT. The assistant instructors will plot all test platoon moves on a copy of Map A. If the test platoon loses more than two tanks to enemy action before the problem is completed, the problem will be run again without benefit of a critique. A critique will be conducted only if the problem is completed.

2. Concept of the Problem:

a. Platoon Mission. The mission of the test platoon is to deny the use of LIVE ROAD to the enemy as an avenue of approach into TOWN. (See paragraph 3, Operation Order.)

b. Platoon Movement. The platoon will move as directed by the platoon leader, or acting platoon sergeant acting in the capacity of platoon leader.

c. Enemy Action. Enemy action will be dependent on the action taken by the test platoon, and will be controlled by the instructor.

(1) WOODS A. Regardless of the test platoon formation, or methods of advance, if the platoon does not reconnoiter WOODS A by fire, the instructor will order Number 1 (enemy AT gun) to fire at any test tank which crosses its light beam. If WOODS A is reconnoitered by fire, the AT gun will be declared out of action; or, if the AT gun has fired (because WOODS A had not been reconnoitered by fire) and the test platoon returns this fire, the AT gun will be declared out of action.

(2) The Curtain. The instructor will open the curtain as the lead tank of the test platoon approaches the approximate vicinity of POINT X. (See Map A.)

(3) Enemy Position 2. If any test platoon tanks move to the left (east) of HILL B, and do not reconnoiter the forward (west) edge of TOWN, the instructor will order Number 2 to open fire. The same condition will exist as explained for Position Number 1, in paragraph (1) above.

(4) Enemy Positions 3 and 4. Same conditions and actions as paragraphs (1) and (3) above.

d. Termination of Problem. The problem will be terminated (or suspended) when any of the following conditions exist:

(1) The test platoon leader, or platoon sergeant acting in the capacity of platoon leader, calls the team commander (instructor) and reports in essence, MISSION ACCOMPLISHED.

(2) The test platoon has lost more than two tanks to enemy action.

(3) The test platoon has lost more than two tanks because of faulty equipment (not the fault of the operator).

(4) The test platoon communications net is inoperative (not tank interphone, or operator, deficiency).

(5) At the discretion of the instructor, if damage to equipment (miniature tanks or terrain features) appears to be imminent.

e. Critique. The problem will be given a critique by the instructor and platoon leader, to include a discussion of the problem by the student operators.

NOTE: None of the above will be issued to the students.

3. Operation Order (Issue Map B, order will be given orally.):

a. "An enemy armor force of considerable strength is moving southwest (off the map to the northeast) toward TOWN. Scattered enemy advance elements have been reported in the vicinity of the LAKE and WOODS F."

b. "Our team attacks in 30 minutes to deny the enemy the use of LIVE ROAD as an approach from the northeast into TOWN. 1st and 2d Platoons abreast, 1st Platoon on the left; 3d Platoon, follow the 2d Platoon. We do not have any artillery or mortar support."

c. "1st Platoon, attack on the left. Your mission is to deny the enemy use of LIVE ROAD through HILLS C and D."

d. "2d Platoon will deny the enemy use of LIVE ROAD in your sector."

e. "3d Platoon, follow the 2d Platoon."

f. "I will be with the 2d Platoon initially. Are there any questions?"

"The time is now _____ hours."

"Report to me when ready."

"We move out in 15 minutes."

NOTE: The oral order and five copies of Map B will be issued to the test platoon by the platoon leader.

4. Solution and Score Sheet:

NOTE: The platoon leader assembles the tank commanders, gives them the oral operation order, and answers any questions about the operator order. The tank commander picked to act as platoon sergeant is told to make a visual reconnaissance of the area and a map reconnaissance of the area not visible, then to issue his attack order to the tank commanders.

	<u>Value</u>	<u>Score</u>
a. Tank commanders relay the platoon attack order to their crews, and mention:	1	_____
(1) Enemy force	1	_____
Strength	1	_____
Direction of movement	1	_____
Composition	1	_____
Advance elements and location (LAKE and WOODS F)	1	_____
(2) Friendly force	1	_____
Strength	1	_____
Mission: block enemy approach from northeast	1	_____
Time of attack (in 15 minutes)	1	_____
Disposition of platoons	1	_____
1st Platoon (on left)	1	_____
2d Platoon	1	_____
3d Platoon (following 2d Platoon)	1	_____
No supporting fire available	1	_____
Mission of 1st Platoon: deny LIVE ROAD to enemy where it passes through HILLS C and D	1	_____
Initial platoon formation (wedge or echelon left)	1	_____
Scheme for movement, "Plan for movement"	1	_____
Report when ready	1	_____
b. Tanks reconnoitered WOODS A by fire.	1	_____
c. Tanks reconnoitered TOWN by fire.	1	_____
d. Tanks reconnoitered WOODS E by fire.	1	_____

e. Tanks reconnoitered WOODS F by fire.	1	_____
f. Tanks occupy HILL B and the platoon sergeant reports to the team commander in effect, MISSION ACCOMPLISHED.	10	_____
g. Platoon sergeant moves section around either right or left of HILL B, and secures HILL C or HILL D.		
(1) Moves around flank of HILL B.	1	_____
(2) Designates manner of move.	1	_____
(3) Designates tanks to act as base of fire.	1	_____
h. Platoon sergeant moves base of fire to either HILL C or HILL D.		
(1) Moves around flank(s) of HILL B.	1	_____
(2) Designates manner of movement.	1	_____
NOTE: An alternate solution is given below.		
i. Platoon sergeant moves platoon around right or left of HILL B and secures HILLS C and D.	1	_____
(1) Moves around flank(s) of HILL B.	1	_____
(2) Designates manner of movement.	1	_____
j. No enemy weapon was ordered by instructor to fire.	5	_____
k. One enemy weapon was ordered by instructor to fire.	3	_____
l. Any action taken by the platoon sergeant besides what is designated in the score sheet is worth one point for entire action taken.	1	_____
m. Completes problem with <u>no</u> tank losses.	15	_____
n. Completes problem with one tank loss.	10	_____
o. Completes problem with two tank losses.	5	_____
p. Completes problem with three tank losses.	2	_____
q. Completes problem with four tank losses.	1	_____
	Score Made	_____
r. Deduct <u>five</u> points from score made if incorrect radio procedure was habitually used.	5	_____
	Total Score	_____